WR-35
Rev (8-10)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: November 28, 2012
API #: 47-1301249 - D

Farm name: Yoak, Herbert T. Operator Well No.: Yoak #1

LOCATION: Elevation: 607 Quadrangle: Annamoriah

District: Sheridan County: Calhoun
Latitude: ____ Feet South of ____ Deg. ____ Min. ____ Sec.
Longitude ____ Feet West of ____ Deg. ____ Min. ____ Sec.

Company: Buckeye Oil Producing Co.

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
PO Box 129, Wooster, OH 44691	10"	391'	391'	cmt to surface
Agent: Henry W. Sinnett	8-1/4"	980'	980'	-0-
Inspector: Ed Gainer	7"	1095'	1095'	600'
Date Permit Issued: 7/10/2012	4-1/2"	2554'	2554'	1513'
Date Well Work Commenced: 7-15-12				
Date Well Work Completed: 11-2-12				
Verbal Plugging: N/A				
Date Permission granted on:				
Rotary X Cable Rig				
Total Vertical Depth (ft): 2590'				
Total Measured Depth (ft): 2590'				
Fresh Water Depth (ft.): 30'				
Salt Water Depth (ft.): 699'				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.):				
Void(s) encountered (N/Y) Depth(s)				

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Environmental Protection

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Gordon - Gantz Pay zone depth (ft) 2176-2474
Gas: Initial open flow - MCF/d Oil: Initial open flow - Bbl/d
Final open flow 30 MCF/d Final open flow 2 Bbl/d
Time of open flow between initial and final tests 72 Hours
Static rock Pressure 770 psig (surface pressure) after 72 Hours

Second producing formation Berea Pay zone depth (ft) 2098-2113
Gas: Initial open flow - MCF/d Oil: Initial open flow - Bbl/d
Final open flow 5 MCF/d Final open flow 5 Bbl/d
Time of open flow between initial and final tests 72 Hours
Static rock Pressure 190 psig (surface pressure) after 72 Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Mark L. Yoke
Signature

12/31/12
Date

13-01249D

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes_____ No X

Were Y Electrical, N Mechanical, N or Geophysical logs recorded on this well?
Y/N Y/N Y/N

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

	Berea	Gantz-Gordon
Perforation Interval:	2098-2113	2176-2474
# of Perforations:	17	26
Type of Frac:	Gel-Water	Slick water
Sks. of Sand:	200 sks	290 sks
Fracked Berea w/ 37,000 gal. Gelled water & 200 sks of 20/40 sand 25 BPM @ 1291 psi.		
Fracked Gordon-Gantz 72,000 slick water 290 sks of 20/40 sand 33 BPM @ 1211 psi. 5 min. S.I. 692		

Formations Encountered: Surface:	Top Depth /	Bottom Depth
Big Injun	1673	1716
Berea	2098	2112
Gantz	2172	2250
Gordon	2452	2476

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State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: November 28, 2012
API #: 47-1303023 W

Farm name: Fisher, James & Sheila Operator Well No.: Fisher #7

LOCATION: Elevation: 940 Quadrangle: Annamoriah

District: Sheridan County: Calhoun
Latitude: ____ Feet South of ____ Deg. ____ Min. ____ Sec.
Longitude ____ Feet West of ____ Deg. ____ Min. ____ Sec.

Company: Buckeye Oil Producing Co.

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
PO Box 129, Wooster, OH 44691	6-5/8"	1821		cmt to surface
Agent: Henry W. Sinnett	4-1/2"	2276	2276	850 fill up
Inspector: Ed Gainer				
Date Permit Issued: 7/10/2012				
Date Well Work Commenced: 8/2/12				
Date Well Work Completed: 10/1/12				
Verbal Plugging: No				
Date Permission granted on:				
Rotary Cable X Rig				
Total Vertical Depth (ft): 2380				
Total Measured Depth (ft): 2380				
Fresh Water Depth (ft.): 60				
Salt Water Depth (ft.): 945				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): n/a				
Void(s) encountered (N/Y) Depth(s) n/a				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Berea Pay zone depth (ft) 2352 - 2368
Gas: Initial open flow - MCF/d Oil: Initial open flow - Bbl/d
Final open flow 5 MCF/d Final open flow 2 Bbl/d
Time of open flow between initial and final tests 72 Hours
Static rock Pressure 17 psig (surface pressure) after 72 Hours

Second producing formation ____ Pay zone depth (ft) ____
Gas: Initial open flow ____ MCF/d Oil: Initial open flow ____ Bbl/d
Final open flow ____ MCF/d Final open flow ____ Bbl/d
Time of open flow between initial and final tests ____ Hours
Static rock Pressure ____ psig (surface pressure) after ____ Hours

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I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Mark J. Tytko
Signature

1/24/13
Date

13-030231W

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes_____ No X

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list NONE

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

	Berea
Perforation Interval:	Open hole
# of Perforations:	
Type of Frac:	Gel Water
Sks. of Sand:	250 sks

Ran new 4-1/2" casing w/Ballon Packer set @ 2276'. Cemented w/65 sks of cement. Open hole - open from 2276-2380' fracked w/35,249 gal. water 23 BPM @ 1138 psi and 250 sks of sand.

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: Surface:	Top Depth /	Bottom Depth
Big Lime	1870	1918
Big Injun	1918	1994
Berea	2352	2374

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Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: November 30, 2012
API #: 47-1304734

Farm name: Webb, Jack - Heirs Operator Well No.: Depue #7

LOCATION: Elevation: 940' Quadrangle: Grantsville

District: Center County: Calhoun
Latitude: _____ Feet South of _____ Deg. _____ Min. _____ Sec.
Longitude _____ Feet West of _____ Deg. _____ Min. _____ Sec.

Company: Buckeye Oil Producing Co.

Address: PO Box 129, Wooster, OH 44691	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
	7"	252'	252'	cmt to surface
Agent: Henry W. Sinnett	4-1/2"	2792'	2792'	814 cu ft 1654' fill up
Inspector: Ed Gainer				
Date Permit Issued: 8/2/12				
Date Well Work Commenced: 8/5/12				
Date Well Work Completed: 12/14/12				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 2812				
Total Measured Depth (ft): 2820				
Fresh Water Depth (ft.): 60				
Salt Water Depth (ft.): 945				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.):				
Void(s) encountered (N/Y) Depth(s)				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Gordon - Gantz Pay zone depth (ft) 2447 - 2740
Gas: Initial open flow 5 MCF/d Oil: Initial open flow 1 Bbl/d
Final open flow 15 MCF/d Final open flow 2 Bbl/d
Time of open flow between initial and final tests 72 Hours
Static rock Pressure 690 psig (surface pressure) after 72 Hours

Second producing formation Berea Pay zone depth (ft) 2363 - 2384
Gas: Initial open flow 5 MCF/d Oil: Initial open flow 5 Bbl/d
Final open flow 10 MCF/d Final open flow 12 Bbl/d
Time of open flow between initial and final tests 72 Hours
Static rock Pressure 429 psig (surface pressure) after 72 Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Mark J. Fitch
Signature

1/24/13
Date

13-04734

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes_____ No X

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Gamma Ray, Neutron Compensated Density

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Perf: 2363 - 2384, 17 shots, fracked with 30,500 gal water 22,000 lbs. 20/40 sand. 19BPM @ 950 psi.

2447 - 2740, 30 shots, fracked with 72,700 gal water 30,000 lbs. 20/40 sand. 32 BPM @ 1025 psi.

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: Surface:	Top Depth /	Bottom Depth
Big Injun	1940	2006
Berea	2363	2384
Gantz	2448	2513
30'	2588	2634
Gordon	2718	2740

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Rev (5-01)

DATE: 10/19-2010
API # : 47-017-05869

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

Well Operator's Report of Well Work

Farm name: Lorelei Phillips et al — Operator Well No.: Phillips #2

LOCATION: Elevation: 1,088' — Quadrangle: Smithburg 7.5'

District: West Union — County: Doddridge
Latitude: 1,335' Feet South of 39 Deg. 20 Min. 00 Sec.
Longitude 9,780' Feet West of 80 Deg. 42 Min. 30 Sec.

Company:
Alpha Gas Corporation

Address:
1503 Sycamore Lick Rd. Jane Lew, WV 26378

Agent: Jonelle M. Swiger

Inspector: David Scranage

Date Permit Issued: 09/14/2009

Date Well Work Commenced: 09/28/2010

Date Well Work Completed: 10/03/2010

Verbal Plugging:

Date Permission granted on:

Rotary X Cable Rig

Total Depth (feet): 2941

Fresh Water Depth (ft.): N/A

Salt Water Depth (ft.): N/A

Is coal being mined in area (N/Y)? N

Coal Depths (ft.): N/A

Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
13 3/8			
9 5/8	120	120	50 sks
6 5/8	1433	1433	180 sks
4 1/2	2941	2875	80 sks

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Environmental Protection

OPEN FLOW DATA

Producing formation Gordan Pay zone depth (ft) 2773-2794 ft.
Gas: Initial open show MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 200 MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure 65# psig (surface pressure) after 48 Hours

Second producing formation Injun Pay zone depth (ft) 2064-2166 ft.
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

* = commingled zones

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS,

Signed: _____
By: _____
Date: _____

17-05869

Phillips #2
47-017-05869

Stage #1	perfs	sand	avg rate	isip
Gordan	2773-2794 18 holes	200 sks	28 bpm	1245#
Stage #2				
Injun	2064-2166 18 holes	300 sks	28 bpm	1135#

Drillers Log

Sh	0	25
Sd/Sh	25	695
Sd	695	740
Sd/Sh	740	1996
B. Lime	1996	2064
B. Injun	2064	2176
Sd/Sh	2176	2768
Gordan	2768	2800
Sd/Sh	2800	2941

Td 2941 ft. Gas ck @ TD = odor

Electric Log Tops

Big Lime 1996 ft.
Big Injun 2064 ft.
Gordan 2768 ft.

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State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 2/19/2013
API #: 47-017-06080

Farm name: Powell, Dennis H. and Mellie Operator Well No.: Neely Unit 2H

LOCATION: Elevation: 881' Quadrangle: Smithburg 7.5'

District: Grant County: Doddridge
Latitude: 6,902 Feet South of 39 Deg. 17 Min. 30 Sec.
Longitude 5,654 Feet West of 80 Deg. 40 Min. 00 Sec.

Company: Antero Resources Appalachian Corp

Address: 1625 17th Street	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Denver, CO 80202	20" 94#	40'	40'	38 Cu. Ft. Class A
Agent: CT Corporation System	13-3/8" 48#	380'	380'	528 Cu. Ft. Class A
Inspector: Sam Ward	9-5/8" 36#	2497'	2497'	1017 Cu. Ft. Class A
Date Permit Issued: 4/26/2012	5-1/2" 20#	13641'	13641'	3350 Cu. Ft. Class H
Date Well Work Commenced: 6/6/2012				
Date Well Work Completed: 12/8/2012	2-3/8" 4.7#	6649'		
Verbal Plugging: N/A				
Date Permission granted on: N/A				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 6,633' TVD				
Total Measured Depth (ft): 13,664' MD				
Fresh Water Depth (ft.): 105'				
Salt Water Depth (ft.): 1216'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 154', 236', 273'				
Void(s) encountered (N/Y) Depth(s) N, N/A				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 6,522' TVD (Top)
Gas: Initial open flow — MCF/d Oil: Initial open flow N/A Bbl/d
Final open flow 8,304 MCF/d Final open flow N/A Bbl/d
Time of open flow between initial and final tests N/A Hours
Static rock Pressure 3550 psig (surface pressure) after — Hours

Second producing formation_____ Pay zone depth (ft)_____
Gas: Initial open flow_____MCF/d Oil: Initial open flow_____Bbl/d
Final open flow_____MCF/d Final open flow _____Bbl/d
Time of open flow between initial and final tests_____Hours
Static rock Pressure_____psig (surface pressure) after _____Hours

FEB 21 2013

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Lisa Bottinelli
Signature

2/19/13
Date

17-06080

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes X No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Yes- CBL

This is a subsequent well. Antero only runs wireline logs on the first well on a multi-well pad (Neely Unit 1H API#47-017-06086). Please reference the wireline logs submitted with Form WR-35 for Neely Unit 1H.

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Perforations: 6,927' - 13,575' MD (1392 holes)

Frac'd w/ 10,500 gals 15% HCL Acid, 136,738 bbls Slick Water carrying 731,159# 100 mesh,

2,766,121# 40/70 and 1,653,769# 20/40 sand.

Plug Back Details Including Plug Type and Depth(s): N/A

Formations Encountered: Surface:	Top Depth	/	Bottom Depth
Big Lime est.	1,571'		2,321'
Fifty Foot Sandstone est.	2,322'		4,174'
Bradford est.	4,175'		4,640'
Benson est.	4,641'		4,897'
Alexander est.	4,898'		5,114'
Elk est.	5,115'		5,673'
Rhinestreet	5,674'		6,178'
Sycamore	6,179'		6,268'
Middlesex	6,269'		6,325'
West River	6,326'		6,367'
Genundewa	6,368'		6,411'
Burket	6,412'		6,442'
Tully	6,443'		6,504'
Hamilton	6,505'		6,521'
Marcellus	6,522'		6,633' TVD

✓

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 2/19/2013
API #: 47-017-06084

Farm name: Powell, Dennis H. and Mellie   Operator Well No.: Leatherman Unit 1H

LOCATION: Elevation: 881'   Quadrangle: Smithburg 7.5'

District: Grant   County: Doddridge
Latitude: 6,894 Feet South of 39 Deg. 17 Min. 30 Sec.
Longitude 5,659 Feet West of 80 Deg. 40 Min. 00 Sec.

Company: Antero Resources Appalachian Corp

Address: 1625 17th Street	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Denver, CO 80202	20" 94#	40'	40'	38 Cu. Ft. Class A
Agent: CT Corporation System	13-3/8" 48#	353'	353'	490 Cu. Ft. Class A
Inspector: Sam Ward	9-5/8" 36#	2601'	2601'	1514 Cu. Ft. Class A
Date Permit Issued: 5/22/2012	5-1/2" 20#	13917'	13917'	3395 Cu. Ft. Class H
Date Well Work Commenced: 7/6/2012				
Date Well Work Completed: 12/13/2012	2-3/8" 4.7#	6677'		
Verbal Plugging: N/A				
Date Permission granted on: N/A				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 6,630' TVD				
Total Measured Depth (ft): 13,917' MD				
Fresh Water Depth (ft.): est. 103'				
Salt Water Depth (ft.): None available				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 154', 236', 273'				
Void(s) encountered (N/Y) Depth(s) N, N/A				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft) 6,528' TVD (Top)
Gas: Initial open flow —— MCF/d Oil: Initial open flow N/A Bbl/d
Final open flow 9,118 MCF/d Final open flow N/A Bbl/d
Time of open flow between initial and final tests N/A Hours
Static rock Pressure 3550 psig (surface pressure) after —— Hours

Second producing formation ________ Pay zone depth (ft) ________
Gas: Initial open flow ______ MCF/d Oil: Initial open flow ______ Bbl/d
Final open flow ______ MCF/d Final open flow ______ Bbl/d
Time of open flow between initial and final tests ______ Hours
Static rock Pressure ______ psig (surface pressure) after ______ Hours

FEB 21 2013

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Lisa Bottinelli
Signature

2/19/13
Date

17-06084

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes X No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Yes- CBL

This is a subsequent well. Antero only runs wireline logs on the first well on a multi-well pad (Neely Unit 1H API#47-017-06066). Please reference the wireline logs submitted with Form WR-35 for Neely Unit 1H.

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Perforations: 6,666' - 13,851' MD (1452 holes)

Frac'd w/ 11,000 gals 15% HCL Acid, 150,915bbls Slick Water carrying 791,499# 100 mesh,

2,947,320# 40/70 and 1,867,227# 20/40 sand.

Plug Back Details Including Plug Type and Depth(s): N/A

Formations Encountered: Surface:	Top Depth /	Bottom Depth
Big Lime est.	1,571'	2,321'
Fifty Foot Sandstone est.	2,322'	4,174'
Bradford est.	4,175'	4,640'
Benson est.	4,641'	4,897'
Alexander est.	4,898'	5,114'
Elk est.	5,115'	5,664'
Rhinestreet est.	5,665'	6,045'
Sycamore est.	6,046'	6,114'
Sonyea est.	6,115'	6,257'
Middlesex est.	6,258'	6,328'
West River est.	6,329'	6,370'
Genundewa est.	6,371'	6,416'
Burket est.	6,417'	6,446'
Tully est.	6,447'	6,510'
Hamilton est.	6,511'	6,527'
Marcellus est.	6,528'	6,630' TVD

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 1/18/2013
API #: 47-017-06085

Farm name: Powell, Dennis H. and Mellie Operator Well No.: Leatherman Unit 2H

LOCATION: Elevation: 881' Quadrangle: Smithburg 7.5'

District: Grant County: Doddridge
Latitude: 6,885 Feet South of 39 Deg. 17 Min. 30 Sec.
Longitude 5,665 Feet West of 80 Deg. 40 Min. 00 Sec.

Company: Antero Resources Appalachian Corp

Address: 1625 17th Street	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Denver, CO 80202	20" 94#	40'	40'	38 Cu. Ft. Class A
Agent: CT Corporation System	13-3/8" 48#	380'	380'	528 Cu. Ft. Class A
Inspector: Sam Ward	9-5/8" 36#	2707'	2707'	1514 Cu. Ft. Class A
Date Permit Issued: 5/22/2012	5-1/2" 20#	14446'	14446'	3395 Cu. Ft. Class H
Date Well Work Commenced: 7/29/2012				
Date Well Work Completed: 12/18/2012	2-3/8" 4.7#	6630'		
Verbal Plugging: N/A				
Date Permission granted on: N/A				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 6,643' TVD				
Total Measured Depth (ft): 14,446' MD				
Fresh Water Depth (ft.): 103'				
Salt Water Depth (ft.): None available				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 154', 236', 273'				
Void(s) encountered (N/Y) Depth(s) N, N/A				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 6,545' TVD (Top)
Gas: Initial open flow ---- MCF/d Oil: Initial open flow N/A Bbl/d
Final open flow 5,821 MCF/d Final open flow N/A Bbl/d
Time of open flow between initial and final tests N/A Hours
Static rock Pressure 3550 psig (surface pressure) after ---- Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

FEB 21 2013

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Lisa Bothelei
Signature

2/19/13
Date

17-06085

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes X No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Yes- CBL

This is a subsequent well. Antero only runs wireline logs on the first well on a multi-well pad (Neely Unit 1H API#47-017-06086). Please reference the wireline logs submitted with Form WR-35 for Neely Unit 1H.

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Perforations: 7,135' - 14,377' MD (1452 holes)

Frac'd w/ 11,000 gals 15% HCL Acid, 150,553 bbls Slick Water carrying 843,928# 100 mesh,

3,000,406# 40/70 and 1,861,910# 20/40 sand.

Plug Back Details Including Plug Type and Depth(s): N/A

Formations Encountered: Surface:	Top Depth /	Bottom Depth
Big Lime est.	1,571'	2,321'
Fifty Foot Sandstone est.	2,322'	4,174'
Bradford est.	4,175'	4,640'
Benson est.	4,641'	4,897'
Alexander est.	4,898'	5,114'
Elk est.	5,115'	5,664'
Rhinestreet est.	5,665'	6,045'
Sycamore est.	6,046'	6,114'
Sonyea est.	6,115'	6,257'
Middlesex est.	6,258'	6,315'
West River est.	6,316'	6,359'
Genundewa est.	6,360'	6,431'
Burket	6,432'	6,460'
Tully	6,461'	6,525'
Hamilton	6,526'	6,544'
Marcellus	6,545'	6,643' TVD

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 2/20/2013
API #: 47-017-06086

Farm name: Powell, Dennis H. and Mellie Operator Well No.: Neely Unit 1H

LOCATION: Elevation: 881' Quadrangle: Smithburg 7.5'

District: Grant County: Doddridge
Latitude: 6,911 Feet South of 39 Deg. 17 Min. 30 Sec.
Longitude 5,648 Feet West of 80 Deg. 40 Min. 00 Sec.

Company: Antero Resources Appalachian Corp

Address: 1625 17th Street	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Denver, CO 80202	20" 94#	40'	40'	38 Cu. Ft. Class A
Agent: CT Corporation System	13-3/8" 48#	394'	394'	547 Cu. Ft. Class A
Inspector: Sam Ward	9-5/8" 36#	2561'	2561'	1043 Cu. Ft. Class A
Date Permit Issued: 6/8/2012	5-1/2" 20#	14,082'	14,082'	3452 Cu. Ft. Class H
Date Well Work Commenced: 6/22/2012				
Date Well Work Completed: 12/2/2012	2-3/8" 4.7#	6960'		
Verbal Plugging: N/A				
Date Permission granted on: N/A				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 6,617' TVD				
Total Measured Depth (ft): 14,082' MD				
Fresh Water Depth (ft.): est. 105'				
Salt Water Depth (ft.): None available				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 154', 236', 273'				
Void(s) encountered (N/Y) Depth(s) N, N/A				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 6,515' TVD (Top)
Gas: Initial open flow —— MCF/d Oil: Initial open flow N/A Bbl/d
Final open flow 4,797 MCF/d Final open flow N/A Bbl/d
Time of open flow between initial and final tests N/A Hours
Static rock Pressure 3550 psig (surface pressure) after —— Hours

Second producing formation_____ Pay zone depth (ft)_____
Gas: Initial open flow_____MCF/d Oil: Initial open flow_____Bbl/d
Final open flow_____MCF/d Final open flow _____Bbl/d
Time of open flow between initial and final tests_____Hours
Static rock Pressure_____psig (surface pressure) after _____Hours

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I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Lisa Bothinelli
Signature

2/20/13
Date

17-06086

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes X No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Yes- CBL, Dual Laterolog, Photo Density/Compensated Neutron/ Gamma Ray.

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Perforations: 6,981' - 14,016' MD (1452 holes)

Frac'd w/ 11,000 gals 15% HCL Acid, 147,086 bbls Slick Water carrying 763,222# 100 mesh, 2,925,097# 40/70 and 1,821,671# 20/40 sand.

Plug Back Details Including Plug Type and Depth(s): N/A

Formations Encountered: Surface:	Top Depth	/	Bottom Depth
Big Lime	1,571'		2,321'
Fifty Foot Sandstone	2,322'		4,174'
Bradford	4,175'		4,640'
Benson	4,641'		4,897'
Alexander	4,898'		5,114'
Elk	5,115'		5,664'
Rhinestreet	5,665'		6,045'
Sycamore	6,046'		6,114'
Sonyea	6,115'		6,257'
Middlesex	6,258'		6,315'
West River	6,316'		6,359'
Genundewa	6,360'		6,403'
Burket	6,404'		6,435'
Tully	6,436'		6,499'
Hamilton	6,500'		6,514'
Marcellus	6,515'		6,617' TVD

WR-35

DATE: 12/1/11
API: 47-033-05380

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

Well Operator's Report of Well Work

Farm Name: Bradley Lewis Operator Well No. Shuman #3 DO918

LOCATION: Elevation: 1101.94' Quadrangle: Berlin
District: Elk County: Harrison
Latitude: 8030' Feet S. of 39 Deg. 07 Min. 30 Sec.
Longitude: 10350' Feet W. of 80 Deg. 15 Min. 00 Sec.

Company: Devonian Gas Production,Inc.

Address: PO Box 907		Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. Ft.
Jane Lew, WV 26378		9 5/8	30	30'	
		7"	970'	970'	to surface
Agent:	John Haskins	4 1/2"		4885'	200 sks
Inspector:	Tim Bennett				
Date Permit Issued:	02/03/10				
Date Well Work Commenced:	02/20/10				
Date Well Work Completed:	03/11/10				
Verbal Plugging:					
Date Permission Granted on:					
Rotary X Cable Rig					
Total Depth (ft):	4950'				
Fresh Water Depth (ft):	100'				

Salt Water Depth (ft): NA

Is coal being mined in the area (Y/N)? N
Coal Depths (ft): NA

OPEN FLOW DATA

Producing formations	Pay zone depth (ft)
Bradford	3548'
Benson	4327'
Elk	4729'

Gas: Initial open flow 190 Mcf/d. Oil: Initial open flow N/A Bbl/d
Final open flow 240 Mcf/d. Final open flow N/A Bbl/d
Time to open flow between initial and final tests: 7 Hours
Static rock Pressure 1600 psig (surface press.) after 48 Hours

NOTE: On back of this form put the following: 1) Details of perforated intervals, fracturing or stimulating, physical change, etc. 2) The well log which is a systematic detailed geological record of all formations, including coal encountered by the wellbore.

FEB 21 2013

Signed: John Haskins
By:
Date: 12/1/11

33-05380

HYDRAULIC FRACTURING DETAILS

STAGE	FORMATION	PERFORATIONS	SAND
		# of shots	20/40
1st Stage	Elk	12	35,000
2nd Stage	Benson	14	40,000
3rd Stage	Bradford	9	25,000

DRILLERS LOG

FORMATION	FROM	TO
Fill	0	5
sand & shale	5	847
sand & shale	847	1,445
sand & shale	1,445	1,485
Big Lime	1,485	1,597
sand & shale	1,597	2,330
Fifth Sand	2,330	2,350
sand & shale	2,350	2,430
Bayard	2,430	2,436
sand & shale	2,436	3,545
Bradford	3,545	3,594
sand & shale	3,594	4,306
Benson	4,306	4,332
sand & shale	4,332	4,729
Elk	4,729	TD

ELECTRIC LOG

FORMATION	DEPTH
Big Lime	1,485
Fifth Sand	2,330
Bayard	2,430
Bradford	3,545
Benson	4,306
Elk	4,740

WR-35
Rev (8-10)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 10/8/2011
API #: 47-502250 F

Farm name: Berwin Winifrede Operator Well No.: BW-49 (F)

LOCATION: Elevation: 1073 FT Quadrangle: Belle 7.5'

District: Sherman County: Boone
Latitude: 1,220 Feet South of 38 Deg. 07 Min. 59 Sec.
Longitude 5,870 Feet West of 81 Deg. 36 Min. 32 Sec.

Company: Northstar Energy Corp

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
900 Lee St. E Ste. 940 Charleston, WV	Conduct.	35'	35'	
Agent: James Abcouwer	9 5/8"	580'	580'	578
Inspector: Barry Stollings	7"	1698'	1698'	343
Date Permit Issued: 03/31/2008	4 1/2"		5174'	408
Date Well Work Commenced: 7/24/2009				
Date Well Work Completed: 7/24/2009				
Verbal Plugging:				
Date Permission granted on:				
Rotary Cable Rig				
Total Vertical Depth (ft): 5186'				
Total Measured Depth (ft): 5174'				
Fresh Water Depth (ft.): 245'				
Salt Water Depth (ft.): 1257'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 658'-678'				
Void(s) encountered (N/Y) Depth(s) N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Huron Pay zone depth (ft) 4346
Gas: Initial open flow 420 MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 280 MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests 48 Hours
Static rock Pressure 380 psig (surface pressure) after 48 Hours

Second producing formation Lime Pay zone depth (ft) 2046
Gas: Initial open flow cmgd MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

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I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

10-10-11
Date

5-02250F

Were core samples taken? Yes_____ No X_____ Were cuttings caught during drilling? Yes_____ No X_____

Were ____ Electrical, Y Mechanical, ____ or Geophysical logs recorded on this well?
Y/N Y/N Y/N

Perforated Intervals, Fracturing, or Stimulating:

2 fracture zones performed on the well BJ Services Tested lines to 4200 psi

1st- Lower Huron Perf Intervals 4783'-5100' Nitrogen Fracture, 22 holes total Total N2 =10061 bbls.

200 gal. 7.5% HCL in Hole. Broke and dislplaced treated water with 75 Mscf N2 dropped 13 pref ba

2nd- Middle Huron Perf Intervals 3728'-4352' N2 Fracture,18 holes total, Total Nitrogen = 15082 bbl

100 gal. 7.5% HCL in Hole. Broke and dislplaced treated water with 75 Mscf N2 dropped 18 pref ba

Formations Encountered: Surface:	Top Depth	/ Bottom Depth
Sub Base	0'	10'
Fill	10'	21'
Sand and Shale	21'	935'
Upper Maxon	1610'	1636'
Lower Maxon	1685'	1705'
Little Lime	1720'	1785'
Big Lime	1808'	1995'
Big Injun	2006'	2039'
Middle Weir	2059'	2085'
Lower Weir	2203'	2240'
Berea	2452'	2462'
Middle Huron	3777'	3954'
Lower Huron	4044'	4284'
Marcellus Shale	5132'	5186'

WR-35
Rev (8-10)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 9/28/2010
API #: 47-502318

Farm name: Berwin Winifrede Operator Well No.: BW-53

LOCATION: Elevation: 1010 FT Quadrangle: Belle 7.5'

District: Sherman County: Boone
Latitude: 430 Feet South of 38 Deg. 07 Min. 30 Sec.
Longitude 3580 Feet West of 81 Deg. 35 Min. 00 Sec.

Company: NorthStar Energy Corp

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
900 Lee St. E Ste. 940 Charleston, WV	Conduct.	32'	30'	
Agent: James Abcouwer	9 5/8"	515'	506'	376
Inspector: Barry Stollings	7"	1938'	1928'	392
Date Permit Issued: 02/05/2009	4 1/2"	5250'	5236'	486
Date Well Work Commenced: 1/1/2011				
Date Well Work Completed: 1/12/2011				
Verbal Plugging:				
Date Permission granted on:				
Rotary Cable Rig				
Total Vertical Depth (ft): 5256				
Total Measured Depth (ft): 5250				
Fresh Water Depth (ft.): , 382,439				
Salt Water Depth (ft.): 1486, 1745				
Is coal being mined in area (N/Y)?				
Coal Depths (ft.): 368, 905,				
Void(s) encountered (N/Y) Depth(s) N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation LH, Rhinestreet, Marc. Pay zone depth (ft) 4680
Gas: Initial open flow 270 MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 214 MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests 48 Hours
Static rock Pressure 460 psig (surface pressure) after 48 Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

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MAR 1 1 2013
WV Department of Environmental Protection

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

9-27-11
Date

5-02318

Were core samples taken? Yes_____ No*_____ Were cuttings caught during drilling? Yes*_____ No_____

Were ____ Electrical, Y Mechanical, ____ or Geophysical logs recorded on this well?
Y/N Y/N Y/N

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

2 fracture zones performed on the well BJ Services Tested lines to 4200 psi

1st- Marcellus Perf Intervals 4750'-4850' Nitrogen Fracture, 16 holes total Total Nitrogen = 20,043

125 gal. 15% HCL in Hole. Broke and dislplaced treated water with 75 Mscf N2 dropped 10 pref bal

2nd- Rhinestreet Perf Intervals 4600'-4700' N2 Fracture, 14 holes total, Total Nitrogen = 14,044

125 gal. 15% HCL in Hole. Broke and dislplaced treated water with 75 Mscf N2 dropped 8 pref balls

Formations Encountered: Surface:	Top Depth	/ Bottom Depth
Sub Base	0'	10'
Fill	10'	21'
Sand and Shale	21'	935'
Upper Maxon	1020'	1043'
Lower Maxon	1684'	1698'
Little Lime	1745'	1813'
Big Lime	1857'	2100'
Big Injun	2111'	2138'
Middle Weir	2328'	2343'
Lower Weir	2485'	2506'
Berea	2561'	2573'
Middle Huron	3753'	4167'
Lower Huron	4654'	5072'
Marcellus Shale	5165'	5212'

WR-35
Rev (8-10)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 9/28/2010
API #: 47-502361

Farm name: Berwin Winifrede Operator Well No.: BW-62

LOCATION: Elevation: 1424 FT Quadrangle: Belle 7.5'

District: Sherman County: Boone
Latitude: 14,030 Feet South of 38 Deg. 10 Min. 00 Sec.
Longitude 4,210 Feet West of 81 Deg. 35 Min. 00 Sec.

Company: Northstar Energy Corp.

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
900 Lee St. E Ste. 940 Charleston, WV	Conduct.	32'	30'	
Agent: James Abcouwer	9 5/8"	946'	940'	376
Inspector: Barry Stollings	7"	2248'	2244'	487
Date Permit Issued: 12/28/2010				
Date Well Work Commenced: 1/24/2011				
Date Well Work Completed: 2/1/2011				
Verbal Plugging:				
Date Permission granted on:				
(Rotary) ~~Cable~~ Rig				
Total Vertical Depth (ft): 5588				
Total Measured Depth (ft): 5585				
Fresh Water Depth (ft.): 235, 342,412				
Salt Water Depth (ft.): 1345, 1867				
Is coal being mined in area (N)Y)?				
Coal Depths (ft.): 328, 887, 894				
Void(s) encountered (N/Y) Depth(s) N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Lime, Inj, Ber, Weir Hul Pay zone depth (ft) 5335
Gas: Initial open flow 312 MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 243 MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests 48 Hours
Static rock Pressure 290 psig (surface pressure) after 48 Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

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Signature

9-27-11
Date

5-02361

Were core samples taken? Yes_____ No* ✓ Were cuttings caught during drilling? Yes* ✓ No_____

Were ____ Electrical, Y Mechanical, ____ or Geophysical logs recorded on this well?
Y/N Y/N Y/N

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Naturally Producing Well

Formations Encountered: Surface:	Top Depth /	Bottom Depth
Sub Base	0'	10'
Fill	10'	21'
Sand and Shale	21'	935'
Upper Maxon	1018'	1032'
Lower Maxon	1158'	1191'
Little Lime	2118'	2188'
Big Lime	2304'	2474'
Big Injun	2481'	2510'
Middle Weir	2608'	2645'
Lower Weir	2853'	2900'
Berea	2938'	2943'
Middle Huron	4112'	4454'
Lower Huron	4975'	5438'
Marcellus Shale	5504	5558'

WR-35
Rev (8-10)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 9/28/2010
API #: 47-3906280

Farm name: Berwin Marmet Operator Well No.: BM-26

LOCATION: Elevation: 955 FT Quadrangle: Belle 7.5'

District: Loudon County: Kanawha
Latitude: 13,000 Feet South of 38 Deg. 15 Min. 00 Sec.
Longitude 11,220 Feet West of 81 Deg. 32 Min. 30 Sec.

Company: Northstar Energy Corp

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
900 Lee St. E Ste. 940 Charleston, WV	Conduct.	32'	30'	
Agent: James Abcouwer	9 5/8"	436'	432'	318
Inspector: Terry Urban	7"	1348'	1344'	395
Date Permit Issued: 12/28/2010				
Date Well Work Commenced: 1/16/2011				
Date Well Work Completed: 1/23/2011				
Verbal Plugging:				
Date Permission granted on:				
Rotary Cable Rig				
Total Vertical Depth (ft): 2236				
Total Measured Depth (ft): 2230				
Fresh Water Depth (ft.): 286, 364				
Salt Water Depth (ft.): 856, 1086				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 220, 645, 866				
Void(s) encountered (N/Y) Depth(s) N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Lime, Inj, Weir Pay zone depth (ft) 2150
Gas: Initial open flow 243 MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 156 MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests 48 Hours
Static rock Pressure 280 psig (surface pressure) after 48 Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

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WV Department of Environmental Protection

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

9-27-11
Date

39.06280

Were core samples taken? Yes_____ No*_____ Were cuttings caught during drilling? Yes*_____ No_____

Were ____ Electrical, Y Mechanical, ____ or Geophysical logs recorded on this well?
Y/N Y/N Y/N

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Naturally Producing Well

Formations Encountered: Surface:	Top Depth	/ Bottom Depth
Sub Base	0'	10'
Fill	10'	21'
Sand and Shale	21'	935'
Upper Maxon	935'	972'
Lower Maxon	1032'	1062'
Little Lime	1347'	1486'
Big Lime	1664'	1742'
Big Injun	1780'	1798'
Middle Weir	1983'	2017'
Lower Weir	2133'	2185'

WR-35
Rev (8-10)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 10/8/2011
API #: 47-502132 F

Farm name: Berwin Winifrede Operator Well No.: BW-51 (F)

LOCATION: Elevation: 1041 FT Quadrangle: Belle 7.5'

District: Sherman County: Boone
Latitude: 13,600 Feet South of 38 Deg. 10 Min. 00 Sec.
Longitude 3580 Feet West of 81 Deg. 35 Min. 00 Sec.

Company: NorthStar Energy Corp.

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
900 Lee St. E Ste. 940 Charleston, WV	Conduct.	28'	28'	
Agent: James Abcouwer	9 5/8"	565'	565'	258
Inspector: Barry Stollings	7"	1809'	1809'	366
Date Permit Issued: 03/31/2008	4 1/2"		5161'	498
Date Well Work Commenced: 4/12/2008				
Date Well Work Completed: 4/12/2008				
Verbal Plugging:				
Date Permission granted on:				
Rotary Cable Rig				
Total Vertical Depth (ft): 5183'				
Total Measured Depth (ft): 5171'				
Fresh Water Depth (ft.): 296',362'				
Salt Water Depth (ft.): 1257', 1428'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 385-388				
Void(s) encountered (N/Y) Depth(s) N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Huron Pay zone depth (ft) 4346
Gas: Initial open flow 420 MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 280 MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests 48 Hours
Static rock Pressure 380 psig (surface pressure) after 48 Hours

Second producing formation Lime Pay zone depth (ft) 2046
Gas: Initial open flow cmgd MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

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MAR 11 2013

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature Date 10-10-11

5.02132F

Were core samples taken? Yes_____ No X_____ Were cuttings caught during drilling? Yes_____ No X_____

Were _____ Electrical, Y Mechanical, _____ or Geophysical logs recorded on this well?
Y/N Y/N Y/N

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

2 fracture zones performed on the well Universal Well Services Tested lines to 4200 psi

1st- Huron Perf Intervals 3111'-4346' Nitrogen Fracture, 16 holes total Total Nitrogen = 1.55 mil SC

200 gal. 15% HCL in Hole. Broke and dislplaced treated water with 75 Mscf N2 dropped 15 pref bal

2nd- Big Lime Perf Intervals 1902'-2046' N2 Fracture, 8 holes total, Total Nitrogen = 168,000 SCF

2750 gal. 15% HCL in Hole. Broke and dislplaced treated water with 75 Mscf N2 dropped 6 pref bal

Formations Encountered: Surface:	Top Depth /	Bottom Depth
Sub Base	0'	10'
Fill	10'	21'
Sand and Shale	21'	935'
Upper Maxon	1011'	1129'
Lower Maxon	1496'	1625'
Little Lime	1771'	1822'
Big Lime	1828'	2052'
Big Injun	2063'	2107'
Middle Weir	2183'	2199'
Lower Weir	2248'	2284'
Berea	2514'	2524'
Middle Huron	3715'	3922'
Lower Huron	4003'	4348'
Marcellus Shale	5131'	5162'

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 1-30-2013
API #: 47-039-06329

Farm name: Penn Virginia - Carbon Fuel Operator Well No.: CF- 2H

LOCATION: Elevation: 654' Quadrangle: Cedar Grove 7.5

District: Cabin Creek County: Kanawha
Latitude: 9,870 Feet South of 38 Deg. 12 Min. 30 Sec.
Longitude 9,900 Feet West of 81 Deg. 27 Min. 30 Sec.

Company: Northstar Energy Corp

Address: 900 Lee St. E, Ste940	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Charleston, WV 25301	13 3/8"	10'	10'	
Agent: Nancy M. Abcouwer	9 5/8"	262'	262'	277 cf
Inspector: T. Urban	7 3/8"	1302'	1302'	235 cf
Date Permit Issued: 2-27-2012	4.5"	5,124'	5,124'	80 cf
Date Well Work Commenced: 3/26/2012				
Date Well Work Completed: 5/25/2012				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☑ Cable ☐ Rig ☑				
Total Vertical Depth (ft): 1894				
Total Measured Depth (ft): 5160				
Fresh Water Depth (ft.): 340				
Salt Water Depth (ft.): 800				
Is coal being mined in area (N)Y)? Strip only				
Coal Depths (ft.): Above elev.				
Void(s) encountered (N)Y) Depth(s)				

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OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Weir Pay zone depth (ft) 1708-1898'
Gas: Initial open flow 420 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 312 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 48 Hours
Static rock Pressure 325 psig (surface pressure) after 48 Hours

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Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

1-30-2013
Date

47-039-06329

Were core samples taken? Yes_____ No ✓ Were cuttings caught during drilling? Yes_____ No ✓

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list G.R. / cement bond.

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

8-stage frac in Weir from 5,120' measured depth to 2,050' total depth with 250' to 300' stage seperation. 75Q foam.
Stage 1: 764,263 scf N, 357 sks 20/40 sand, 240 bbl slurry @ 8.5 bpm.
Stage 2+3: 1,403,840 scf N, 992 sks 20/40 sand, 504 bbl slurry @ 9.7 bpm.
Stage 4+5: 1,052,190 scf N, 987 sks 20/40 sand, 502 bbl slurry @ 9.1 bpm.
Stage 6: 433,160 scf N, 414 sks 20/40 sand, 205 bbl slurry @ 10.6 bpm.
~~Plug Back Details Including Plug Type and Depth(s):~~
Stage 7+8: 949,600 scf N, 754 sks 20/40 sand, 425 bbl slurry @ 8.9 bpm.

Formations Encountered: Surface:	Top Depth	/	Bottom Depth
Sub base	0	/	10'
Shale	10	/	85
Sand	85	/	145
Sand + Shale	145	/	205
Sand	205	/	239
Shale	239	/	284
Sand	284	/	555
Salt sand	555	/	710
Maxton	710	/	960
Sand + Shale	960	/	1065
Little Lime	1065	/	1095
Big Lime	1152	/	1290
Big Injun	1290	/	1313
Sandy shale	1313	/	1393
Sand and shale	1393	/	1708
Weir	1708	/	1898

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 1-30-2013
API #: 47-039-06330 H

Farm name: Penn Virginia - Carbon Fuel Operator Well No.: CF - 4 H

LOCATION: Elevation: 654' Quadrangle: Cedar Grove 7.5

District: Cabin Creek County: Kanawha
Latitude: 9,310 Feet South of 38 Deg. 12 Min. 30 Sec.
Longitude 9,870 Feet West of 81 Deg. 27 Min. 30 Sec.

Company: Northstar Energy Corp

Address: 900 Lee St E., Ste 940	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Charleston, WV 25301	13 3/8"	10'	10'	
Agent: Nancy M. Abcouwer	9 5/8"	598'	598'	480 cu ft.
Inspector: T. Urban	7 3/8"	1,080'	1,080'	182 cu ft.
Date Permit Issued:	4.5"	5,132'	5,132'	83 cu ft.
Date Well Work Commenced: 3/30/2012				
Date Well Work Completed: 6/4/2012				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☑ Cable ☐ Rig ☑				
Total Vertical Depth (ft): 1,896				
Total Measured Depth (ft): 5,160				
Fresh Water Depth (ft.): 342				
Salt Water Depth (ft.): 800				
Is coal being mined in area (N)Y)? strip only				
Coal Depths (ft.): above well elev.				
Void(s) encountered (N)Y) Depth(s)				

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OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Weir Pay zone depth (ft) 1710-1896
Gas: Initial open flow 450 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 350 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 48 Hours
Static rock Pressure 360 psig (surface pressure) after 48 Hours

Second producing formation_____ Pay zone depth (ft)_____
Gas: Initial open flow_____MCF/d Oil: Initial open flow_____Bbl/d
Final open flow_____MCF/d Final open flow _____Bbl/d
Time of open flow between initial and final tests_____Hours
Static rock Pressure_____psig (surface pressure) after _____Hours

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Environmental Protection

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature 1-30-2013 Date

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47-039-06330

Were core samples taken? Yes_____ No ✓ Were cuttings caught during drilling? Yes_____ No ✓

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list GR - Cement Bond Log

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

8-stage frac in Weir from 5,128' measured depth to 2,034' total depth with 250' to 300' stage seperation. 75-Q foam.

Stage 1: 562,562 scf N, 498 sks 20/40 sand, 244 bbl slurry @ 33.3 bpm
Stage 2: 487,000 scf N, 489 sks 20/40 248 bbl slurry @ 35.8
Stage 3: 499,606 scf N, 493 sks 20/40 249 bbl slurry @ 34.3
Stage 4: 474,000 scf N, 493 sks 20/40 229 bbl slurry @ 35.6
Stage 5: 455,000 scf N, 494 sks 20/40 235 bbl slurry @ 35.5
Stage 6: 424,918 scf, N 399 sks 20/40 197 bbl slurry @ 36.0

Plug Back Details Including Plug Type and Depth(s):

Stage 7: 444,000 scf N, 392 sks 20/40 207 bbl slurry @ 34.8
Stage 8: 403,883 scf, N, 360 sks 20/40 184 bbl slurry @ 36.0

Formations Encountered: Surface:	Top Depth	/	Bottom Depth
Sub base	0	/	10
Shale	10	/	85
Sand	85	/	145
Sand + shale	145	/	205
Sand	205	/	240
Shale	240	/	712
Sand	712	/	597
Salt sand	597	/	712
Maxton	712	/	962
Sand + shale	962	/	1067
Little Lime	1067	/	1097
Big Lime	1154	/	1292
Big Injun	1292	/	1315
Sandy Shale	1315	/	1395
Silt and shale	1395	/	1710
Weir	1710		1896

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 1-10-13
API #: 47-039-06332

Farm name: BAIL, RAYMOND III AND JANICE Operator Well No.: NANCY GREEN # 2A

LOCATION: Elevation: 1055 Quadrangle: CLENDENIN 7.5

District: BIG SANDY County: KANAWHA
Latitude: Feet South of Deg. Min. Sec.
Longitude Feet West of Deg. Min. Sec.

Company: RAVEN RIDGE ENERGY LLC

Address: 3230 PENNSYLVANIA AVE	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
CHARLESTON WV 25302				
Agent: RYAN CUNNINGHAM				
Inspector: TERRY URBAN	9 5/8		380	CTS
Date Permit Issued: 2-13-2012	7		1832	CTS
Date Well Work Commenced: 3-15-2012	4 1/2		2371	1000' Fill up
Date Well Work Completed: 3-28-2012				
Verbal Plugging:				
Date Permission granted on:				
Rotary [X] Cable [ ] Rig [ ]				
Total Vertical Depth (ft): 2504				
Total Measured Depth (ft): 2504				
Fresh Water Depth (ft.): N/A				
Salt Water Depth (ft.): N/A				
Is coal being mined in area (N)Y)?				
Coal Depths (ft.): N/A				
Void(s) encountered (N/Y) Depth(s) N/A				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation WEIR Pay zone depth (ft) 2100
Gas: Initial open flow 80 MCF/d Oil: Initial open flow 2 Bbl/d
Final open flow 60 MCF/d Final open flow 1 Bbl/d
Time of open flow between initial and final tests 36 Hours
Static rock Pressure 80 psig (surface pressure) after 48 Hours

Second producing formation Pay zone depth (ft)
Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d
Final open flow MCF/d Final open flow Bbl/d
Time of open flow between initial and final tests Hours
Static rock Pressure psig (surface pressure) after Hours

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Signature Date

47-039-06332

Were core samples taken? Yes_____ No ✓ Were cuttings caught during drilling? Yes ✓ No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list GAMMA RAY / NEUTRON DENSITY, INDUCTION, TEMPERATURE

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

PERF WEIR 2100 - 2108 W/10 AND 2156 - 2196 W/20 HOLES

750 BBL 75% Quality Foam FRAC
500 gal 15% HCL 288 SKS 20/40 SAND

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: Top Depth / Bottom Depth
Surface:

SAND AND SHALE	0 - 405	BIG LIME	1830 - 1860
SAND	405 - 555	BIG INJUN	1860 - 1945
SAND AND SHALE	555 - 700	SQUAW	1945 - 1995
SAND	700 - 840	SHALE	1995 - 2100
SHALE	840 - 905	WEIR	2100 - 2195
SAND	905 - 970	SHALE	2195 - 2380
SAND AND SHALE	970 - 1040	COFFEE SHALE	2380 - 2395
SAND	1040 - 1080	SHALE	2395 - 2504
SAND AND SHALE	1080 - 1235	TD	2504
SALT SANDS	1235 - 1600		
SHALE	1600 - 1640		
MAXTON	1640 - 1770		
SHALE	1770 - 1805		
LITTLE LIME	1805 - 1820		
PENCIL CAVE	1820 - 1830		

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 1-10-13
API #: 47-039-06333

Farm name: BAIL, RAYMOND III AND JANICE Operator Well No.: NANCY GREEN 3A

LOCATION: Elevation: 1085 Quadrangle: CLENDENIN 7.5

District: BIG SANDY County: KANAWHA
Latitude: 1720 Feet South of 38 Deg. 30 Min. 00 Sec.
Longitude 10,470 Feet West of 81 Deg. 20 Min. 00 Sec.

Company: RAVEN RIDGE ENERGY LLC

Address: 3230 PENNSYLVANIA AVE	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
CHARLESTON WV 25302				
Agent: RYAN CUNNINGHAM	9 5/8		386	CTS
Inspector: TERRY URBAN	7		1874	CTS
Date Permit Issued: 2-13-12	4 1/2		2376	1000' F. 11 up
Date Well Work Commenced: 3-20-12				
Date Well Work Completed: 3-24-12				
Verbal Plugging:				
Date Permission granted on:				
Rotary [X] Cable [ ] Rig [ ]				
Total Vertical Depth (ft): 2472				
Total Measured Depth (ft): 2472				
Fresh Water Depth (ft.): NA				
Salt Water Depth (ft.): NA				
Is coal being mined in area (N)Y)?				
Coal Depths (ft.): NA				
Void(s) encountered (N/Y) Depth(s) NA				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation WEIR Pay zone depth (ft) 2104
Gas: Initial open flow 50 MCF/d Oil: Initial open flow 1 Bbl/d
Final open flow 40 MCF/d Final open flow 1 Bbl/d
Time of open flow between initial and final tests 48 Hours
Static rock Pressure 110 psig (surface pressure) after 54 Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

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Signature

1-10-13
Date

47-039-06333

Were core samples taken? Yes_____ No ✓ Were cuttings caught during drilling? Yes ✓ No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list GAMMA RAY / NEUTRON DENSITY, INDUCTION, TEMPERATURE

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

PERF WEIR 2104 - 2218 W/40 HOLES

750 BBL 75 Quality FOAM FRAC
500 15% HCL 300 SKS 20/40 SAND

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: Surface:	Top Depth	/	Bottom Depth
SHALE	0 - 270	BIG LIME	1850 - 1880
SAND AND SHALE	270 - 540	BIG INJUN	1880 - 1965
SHALE	540 - 715	SQUAW	1965 - 2005
SAND	715 - 820	SHALE	2005 - 2104
SAND AND SHALE	820 - 920	WEIR	2104 - 2218
SHALE	920 - 970	SHALE	2218 - 2472
SAND	970 - 1000	TD	2472
SHALE	1000 - 1060		
SAND AND SHALE	1060 - 1285		
SALT SANDS	1285 - 1610		
SHALE	1610 - 1650		
MAXTON	1650 - 1790		
SHALE	1790 - 1825		
LITTLE LIME	1825 - 1835		
PENCIL CAVE	1835 - 1850		

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 1-10-13
API #: 47-039-06334

Farm name: NANCY GREEN Operator Well No.: NANCY GREEN #4A

LOCATION: Elevation: 1098 Quadrangle: CLENDENIN 7.5

District: BIG SANDY County: KANAWHA
Latitude: 1520 Feet South of 38 Deg. 30 Min. 00 Sec.
Longitude 11,840 Feet West of 81 Deg. 20 Min. 00 Sec.

Company: RAVEN RIDGE ENERGY LLC

Address: 3230 PENNSYLVANIA AVE	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
CHARLESTON WV 25302				
Agent: RYAN CUNNINGHAM	9 5/8	380	380	CTS
Inspector: TERRY URBAN	7	1892	1892	CTS
Date Permit Issued: 4-5-2012	4 1/2		2385	1000' Fill up
Date Well Work Commenced: 4-24-12				
Date Well Work Completed: 5-14-12				
Verbal Plugging:				
Date Permission granted on:				
Rotary [X] Cable [ ] Rig [ ]				
Total Vertical Depth (ft): 2443				
Total Measured Depth (ft): 2443				
Fresh Water Depth (ft.): N/A				
Salt Water Depth (ft.): N/A				
Is coal being mined in area (N/Y)? N/A				
Coal Depths (ft.): N/A				
Void(s) encountered (N/Y) Depth(s) N/A				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation WEIR Pay zone depth (ft) 2140
Gas: Initial open flow 200 MCF/d Oil: Initial open flow 1 Bbl/d
Final open flow 175 MCF/d Final open flow 1 Bbl/d
Time of open flow between initial and final tests 48 Hours
Static rock Pressure 150 psig (surface pressure) after 36 Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

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Environmental Protection

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Signature

1-10-13
Date

47-039-06334

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes X No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list GAMMA RAY / NEUTRON, DENSITY, INDUCTION, TEMPERATURE

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

PERFORATED 2142 - 2242 W/40
NITROGEN FRAC W/ 338 MMCF

750 BBL 75% Quality Foam FRAC
W/ 500 gal 15% HCL 300 SKS 20/40 SAND

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: Top Depth / Bottom Depth
Surface:

SAND & SHALE	0 - 305	BIG INJUN	1910 - 1985
SAND	305 - 380	SQUAW	1985 - 2040
SAND & SHALE	380 - 635	SHALE	2040 - 2140
SHALE	635 - 690	WEIR	2140 - 2246
SAND & SHALE	690 - 810	SHALE	2246 - 2443
SHALE	810 - 840	TD	2443
SAND	840 - 890		
SAND & SHALE	890 - 1255		
SALT SANDS	1255 - 1656		
SHALE	1656 - 1685		
MAXTON	1685 - 1860		
SHALE	1860 - 1854		
LITTLE LIME	1854 - 1860		
PENCIL CAVE	1860 - 1876		
BIG LIME	1876 - 1910		

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: Revised 2/20/2013
API #: 47-049-02130

Farm name: Cain, Richard Operator Well No.: Fenn A 9H

LOCATION: Elevation: 1,251' Quadrangle: Shinnston

District: Lincoln County: Marion
Latitude: 590' Feet South of 39 Deg. 27 Min. 30 Sec.
Longitude 7,320' Feet West of 80 Deg. 17 Min. 30 Sec.

Company: XTO Energy Inc.

Address: PO Box 1008, Jane Lew, WV 26378	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
	20"	118'	118'	C.T.S.
Agent: Gary Beall	13 3/8"	580'	580'	300 bbls
Inspector: Tristan Jenkins	9 5/8"	3,050'	3,050'	1008.9 cuft
Date Permit Issued: 12/27/2010	5 1/2"	12,746'	12,727'	2626.8 cuft
Date Well Work Commenced: 5/27/2011				
Date Well Work Completed: 10/27/2011				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 7497'				
Total Measured Depth (ft): 12,746'				
Fresh Water Depth (ft.): 406'				
Salt Water Depth (ft.): None Encountered				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): None Noted				
Void(s) encountered (N/Y) Depth(s) N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 7441'-7497'
Gas: Initial open flow Show MCF/d Oil: Initial open flow ——— Bbl/d
Final open flow Show MCF/d Final open flow ——— Bbl/d
Time of open flow between initial and final tests ——— Hours
Static rock Pressure ——— psig (surface pressure) after ——— Hours

Second producing formation ——— Pay zone depth (ft) ———
Gas: Initial open flow ——— MCF/d Oil: Initial open flow ——— Bbl/d
Final open flow ——— MCF/d Final open flow ——— Bbl/d
Time of open flow between initial and final tests ——— Hours
Static rock Pressure ——— psig (surface pressure) after ——— Hours

FEB 25

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

2-21-13
Date

49-02130

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes X No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list MWD, GR, ROP, VS, TVD

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Stg 1 Marcellus; 12,485'-12,655; 72 shots; Slick water frac; Avg treating 7032 psi@80 bpm; 85,874#s 100 mesh; 292,774#s 30/50 mesh; 7,413 bbl water, 1140 bbl treated water

Stg 2 Marcellus; 12,233'-12,403; 72 shots; Slick water frac; Avg treating 7163 psi@82 bpm; 87,700#s 100 mesh; 295,300#s 30/50 mesh; 7,594 bbl water, 1100 bbl treated water

Stg 3 Marcellus; 11,981'-12,151; 72 shots; Slick water frac; Avg treating 7079 psi@80 bpm; 87,085#s 100 mesh; 294,846#s 30/50 mesh; 8260 bbl water, 369 bbl treated water

Stg 4 Marcellus; 11,729'-11,899; 72 shots; Slick water frac; Avg treating 8059 psi@34 bpm; 10,697#s 100 mesh; 12,705#s 30/50 mesh; 11,600 bbl water, 45 bbl treated water

Stg 5 Marcellus; 11,343'-11,521; 72 shots; Slick water frac; Avg treating 7053 psi@81 bpm; 85,770#s 100 mesh; 297,209#s 30/50 mesh; 8,651 bbl water

Stg 6 Marcellus; 11,083'-11,261; 72 shots; Slick water frac; Avg treating 7026 psi@79 bpm; 87,563#s 100 mesh; 287,942#s 30/50 mesh; 8,935 bbl water

Plug Back Details Including Plug Type and Depth(s):

See additional page

Formations Encountered: Surface:	Top Depth / Bottom Depth
Little Lime	1710 - 1723
Big Lime	1741 - 1836
Big Injun	1836 - 1900
5th Sand	2809 - 2833
Balltown	3709 - 3725
Geneseo Shale	7202 - 7251
Tully Limestone	7251 - 7302
Hamilton Shale	7302 - 7366
Upper Marcellus	7366 - 7457
Purcell Limestone	7457 - 7497

49-02130

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47-049-02130

Stg 7 Marcellus; 10,823'-11,001; 72 shots; Slick water frac; Avg treating 7093 psi@81 bpm; 87,842#s 100 mesh; 296,178#s 30/50 mesh; 8,544 bbl water
Stg 8 Marcellus; 10,563'-10,741; 72 shots; Slick water frac; Avg treating 7186 psi@82 bpm; 85,213#s 100 mesh; 297,756#s 30/50 mesh; 8,617 bbl water
Stg 9 Marcellus; 10,303'-10,481; 72 shots; Slick water frac; Avg treating 7209 psi@83 bpm; 85,312#s 100 mesh; 249,525#s 30/50 mesh; 7501 bbl water, 782 bbl treated water
Stg 10 Marcellus;10,043'-10,221; 72 shots; Slick water frac; Avg treating 7172psi@84 bpm; 85,808#s 100 mesh; 292,083#s 30/50 mesh; 6863 bbl water, 1660 bbl treated water
Stg 11 Marcellus; 9,783'-9,961; 72 shots; Slick water frac; Avg treating 7021 psi@81 bpm; 85,024#s 100 mesh; 290,007#s 30/50 mesh; 7,336 bbl water, 1,117 bbl treated water
Stg 12 Marcellus; 9,523'-9,701; 72 shots; Slick water frac; Avg treating 7077 psi@80 bpm; 83,170#s 100 mesh; 295,180#s 30/50 mesh; 7467 bbl water, 1079 bbl treated water
Stg 13 Marcellus; 9,263'-9,441; 72 shots; Slick water frac; Avg treating 7052 psi@82 bpm; 83,851#s 100 mesh; 293,898#s 30/50 mesh; 7354 bbl water, 1158 bbl treated water
Stg 14 Marcellus; 9,003'-9,181; 72 shots; Slick water frac; Avg treating 7037 psi@79 bpm; 85,712#s 100 mesh; 276,342#s 30/50 mesh; 7171 bbl water, 1117 bbl treated water
Stg 15 Marcellus; 8,743'-8,921; 72 shots; Slick water frac; Avg treating 7103 psi@84 bpm; 83,845#s 100 mesh; 292,327#s 30/50 mesh; 7344 bbl water, 1100 bbl treated water
Stg 16 Marcellus; 8,483'-8,661; 72 shots; Slick water frac; Avg treating 6721 psi@84 bpm; 88,154#s 100 mesh; 295,262#s 30/50 mesh; 7173 bbl water, 1301 bbl treated water
Stg 17 Marcellus; 8,223'-8,401; 72 shots; Slick water frac; Avg treating 6937 psi@82 bpm; 86,114#s 100 mesh; 297,129#s 30/50 mesh; 7729 bbl water, 830 bbl treated water
Stg 18 Marcellus; 7,963'-8,141; 72 shots; Slick water frac; Avg treating 6619 psi@84 bpm; 85,777#s 100 mesh; 298,734#s 30/50 mesh; 7,122 bbl water, 1,248 bbl treated water
Stg 19 Marcellus; 7,703'-7,881; 72 shots; Slick water frac; Avg treating 7099 psi@79 bpm; 83,699#s 100 mesh; 297,771#s 30/50 mesh; 7582 bbl water, 863 bbl treated water

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 2013-02-28
API #: ~~4704501441501~~
45-014415 PP/FRAC

Farm name: Cole & Crane Trust Operator Well No.: 507550

LOCATION: Elevation: 1,259 Quadrangle: PANTHER

District: COLE, ALBERT H. County: Logan, WV
Latitude: 37.737960533 Feet South of ____ Deg. ____ Min. ____ Sec.
Longitude -81.938661785 Feet West of ____ Deg. ____ Min. ____ Sec.

Company: EQT Production Company

Address: EQT Plaza, Suite 1700	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
625 Liberty Avenue, Pittsburgh, PA 15222	13-3/8"	35'	35'	Grtd
Agent: Rex Cecil Ray	9-5/8"	406'	406'	229
Inspector:	7	2416'	2416'	415
Date Permit Issued: 2008-07-29	4-1/2	5503	5203	367
Date Well Work Commenced: 2009-03-28				
Date Well Work Completed: 2009-04-12				
Verbal Plugging: N/A				
Date Permission granted on:				
Rotary ☑ Cable ☐ Rig ☑				
Total Vertical Depth (ft): 4,650				
Total Measured Depth (ft): 8,350				
Fresh Water Depth (ft.): 52, 74, 184, 309				
Salt Water Depth (ft.): 671,946, 1844, 1997, 2241				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 115 and 175				
Void(s) encountered (N/Y) Depth(s) N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Lower Huron Pay zone depth (ft) 4,267
Gas: Initial open flow 1315 MCF/d Oil: Initial open flow ____ Bbl/d
Final open flow 1039 MCF/d Final open flow ____ Bbl/d
Time of open flow between initial and final tests ____ Hours
Static rock Pressure 1002 psig (surface pressure) after ____ Hours

Second producing formation ____ Pay zone depth (ft) ____
Gas: Initial open flow ____ MCF/d Oil: Initial open flow ____ Bbl/d
Final open flow ____ MCF/d Final open flow ____ Bbl/d
Time of open flow between initial and final tests ____ Hours
Static rock Pressure ____ psig (surface pressure) after ____ Hours

RECEIVED
Office of Oil and Gas
MAR 13 2013
WV Department of
Environmental Protection

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Mike Butcher
Signature

2013-02-28
Date

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes X No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Geophysical

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

See Attachment

Plug Back Details Including Plug Type and Depth(s):

N/A

Formations Encountered: Top Depth / Bottom Depth
Surface:

Sand & Shale / 0 / 115 / 115 -- Coal / 115 / 119 / 4 -- Sand & Shale / 119 / 175 / 56

Coal / 175 / 179 / 4 -- Sand & Shale / 179 / 880 / 701 -- Lee Sands / 880 / 1665 / 785 -- Pennington Group / 1665 / 2362 / 686

Little Lime / 2362 / 2405 / 43 -- Pencil Cave Shale / 2405 / 2425 / 20 -- Big Lime / 2425 / 2650 / 212

Big Injun Sand / 2650 / 2754 / 104 -- Weir Sand / 2754 / 2885 / 131 -- Base Weir / 2885 / 3209 / 324

Sunbury / 3209 / 3237 / 28 -- Berea Sand / 3237 / 3255 / 18 -- Upper Devonian / 3255 / 4267 / 1012

Lower Huron Shale / 4267 / 4651 / 384 -- Java Shale / 4651 / 4781 / 130 -- Angola Shale / 4781 / 4985 / 204

Rhinestreet Shale / 4985

EQT WR-35	Completion	Attachment	Well	Treatment	Summary

Stage	Formation	Frac Type			
1	LOWER HURON	N²			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
8/19/2010	7319 - 7519		4,811.00	6,127.00	5 Min:
					10 Min:
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min:
98,976.00	6,299.00				
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
		1,002,092.00			

Stage	Formation	Frac Type			
2	LOWER HURON	N²			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
8/19/2010	7033 - 7319		3,904.00	5,945.00	5 Min:
					10 Min:
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min:
102,573.00	6,003.00				
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
	7.10	1,003,421.00			

Stage	Formation	Frac Type			
3	LOWER HURON	N²			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
8/19/2010	6792 - 7033		3,861.00	5,742.00	5 Min:
					10 Min:
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min:
104,760.00	5,768.00				
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
	5.30	1,002,898.00			

EQT WR-35	Completion	Attachment	Well	Treatment	Summary
Stage	**Formation**	**Frac Type**			
4	LOWER HURON	N²			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
8/19/2010	6507 - 6792		3,596.00	5,419.00	5 Min:
					10 Min:
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min:
103,353.00	5,534.00				
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
	5.70	1,003,655.00			
Stage	**Formation**	**Frac Type**			
5	LOWER HURON	N²			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
8/19/2010	6221 - 6507		3,649.00	5,648.00	5 Min:
					10 Min:
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min:
105,667.00	5,683.00	3,691.00			
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
	5.40	1,004,707.00			
Stage	**Formation**	**Frac Type**			
6	LOWER HURON	N²			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
8/19/2010	5980 - 6221		3,690.00	5,498.00	5 Min:
					10 Min:
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min:
105,092.00	5,587.00				
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
	6.50	1,002,328.00			

EQT WR-35	Completion	Attachment	Well	Treatment	Summary
Stage	**Formation**	**Frac Type**			
7	LOWER HURON	N²			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
8/19/2010	5695 - 5980		3,701.00	5,415.00	5 Min:
					10 Min:
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min:
104,916.00	5,444.00				
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
	5.60	1,004,067.00			
Stage	**Formation**	**Frac Type**			
8	LOWER HURON	N²			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
8/19/2010	5409 - 5695		3,738.00	5,301.00	5 Min:
					10 Min:
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min:
102,628.00	5,355.00				
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
	5.40	1,002,652.00			
Stage	**Formation**	**Frac Type**			
9	LOWER HURON	N²			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
8/19/2010	5168 - 5409		3,645.00	5,245.00	5 Min:
					10 Min:
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min:
105,140.00	5,279.00				
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
	5.90	1,004,821.00			

EQT WR-35	Completion	Attachment	Well	Treatment	Summary
Stage	**Formation**	**Frac Type**			
10	LOWER HURON	N²			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
8/19/2010	4883 - 5168		3,653.00	5,059.00	5 Min:
					10 Min:
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min:
104,167.00	5,180.00				
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
	5.30	1,002,532.00			
Stage	**Formation**	**Frac Type**			
11	LOWER HURON	N²			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
8/19/2010	4598 - 4883		3,557.00	4,851.00	5 Min:
					10 Min:
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min:
103,129.00	4,879.00				
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
	6.30	1,002,058.00			
Stage	**Formation**	**Frac Type**			
12	LOWER HURON	N²			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
8/19/2010	4356 - 4598		3,632.00	5,164.00	5 Min:
					10 Min:
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min:
103,911.00	5,316.00				
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
	2.70	1,002,473.00			

EQT WR-35	Completion	Attachment	Well	Treatment	Summary
Stage	**Formation**	**Frac Type**			
13	LOWER HURON	N²			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
8/19/2010	4071 - 4356		3,426.00	4,602.00	5 Min:
					10 Min:
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min:
102,558.00	4,629.00	2,985.00			
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
	5.50	1,002,891.00			
Stage	**Formation**	**Frac Type**			
14	BIG LIME	N²			
Date	**From / To**	**# of perfs**	**BD Press**	**ATP Psi**	**SIP Detail**
9/15/2010	2321 - 2331		5,949.00	3,687.00	5 Min: 2657
					10 Min:
Avg Rate	**Max Press PSI**	**ISIP**	**Frac Gradient**		15 Min:
29,160.00	3,995.00	3,182.00	1.46		
Sand Proppant	**Water-bbl**	**SCF N2**	**Acid-Gal**		
647,240.00	229.96	570,976.00	2.00		

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: January 23, 2013 ✓
API #: 47-051-01396

Farm name: Corley Operator Well No.: 1H

LOCATION: Elevation: 1272' Quadrangle: Powhatan Point 7.5'

District: Franklin County: Marshall
Latitude: 14,150 Feet South of 39 Deg. 47 Min. 30 Sec.
Longitude 3,760 Feet West of 80 Deg. 45 Min. 00 Sec.

Company: Gastar Exploration USA, Inc.

Address: 229 West Main St., Suite 301	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Clarksburg, WV 26301	20"	40'	40'	Sanded
Agent: Michael McCown	13-3/8"	1017'	1017'	975'
Inspector: Carl McCune	9-5/8"	2481'	2481'	1058'
Date Permit Issued: 01/24/2011	5-1/2"	12,407'	12,407'	3414'
Date Well Work Commenced: 06/11/2011	2-3/8"		6786'	
Date Well Work Completed: 11/11/2011				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☐ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 6,625'				
Total Measured Depth (ft): 12,408'				
Fresh Water Depth (ft.): 60'				
Salt Water Depth (ft.): 1,600'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): refer to page 2				
Void(s) encountered (N/Y) Depth(s) N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 6835'
Gas: Initial open flow 2658 MCF/d Oil: Initial open flow 39 Bbl/d
Final open flow 2433 MCF/d Final open flow 34 Bbl/d
Time of open flow between initial and final tests 24 Hours
Static rock Pressure 2250 csg. psig (surface pressure) after _____ Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Michael McCown
Signature

1/24/13
Date

51-01396

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes X No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list
YES : GR, Mudlog, Acousti, Density, Induction, Mech Prop, & XMAC

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Plug Back Details Including Plug Type and Depth(s): set plug from 6220' to 6926' (MD)

Formations Encountered: Surface:	Top Depth	/	Bottom Depth
Sewickley:	Top:885, Base: 905	Java:	5378, 5698
Pittsburgh coal:	1061, 1071	Rhinestreet:	6190, 6500
Maxton:	1980, 2030	Cashaqua:	6547, 6692
Big Lime:	2043, 2073	Middlesex:	6642, 6662
Big Injun:	2079	West River:	6664, 6724
Base of Big Injun:	2223	Geneseo:	6726, 6744
Weir:	2397, 2567	Tully:	6740, 6775
Berea:	2581, 2821	Hamilton:	6786, 6836
Gordon:	2855, 2885	Marcellus:	6835, 6888
Benson:	3617, 3627	Onondaga:	6889, NA (TD'd before base)

Fluid & Sand Volume Summary - Corley #1H

Date	Stage	Perforated interval From	Perforated interval To	Fluid Type	Frac Fluid	Pump Down	100 mesh	40/70 M	Total Sand	Avg Inj
		ft	ft		bbls	bbls	lbs	lbs	lbs	BPM
9/26/2011	1	12133	12328	slk wtr	8000	0	88037	215635	303672	87.6
9/27/2011	1A	12133	12328	slk wtr	220	0	0	0	0	4.7
10/2/2011	2	11787	11893	slk wtr	9339	0	87701	282116	369817	87
10/2/2011	3	11535	11616	slk wtr	9446	335	87853	287496	375349	87
10/3/2011	4	11233	11443	slk wtr	9146	231	89881	272846	362727	87
10/3/2011	5	11143	10933	slk wtr	8649	308	89221	251517	340738	89
10/3/2011	6	10633	10843	slk wtr	9198	268	88058	274382	362440	87
10/4/2011	7	10333	10543	slk wtr	9493	260	88926	287687	376613	87
10/4/2011	8	10033	10243	slk wtr	8851	219	89308	287520	376828	88
10/5/2011	9	9733	9943	slk wtr	9617	276	89360	285181	374541	90
10/5/2011	10	9433	9643	slk wtr	8892	191	88114	282104	370218	86
10/6/2011	11	9133	9343	slk wtr	8757	142	89054	291266	380320	87
10/6/2011	12	8833	9043	slk wtr	8678	167	88395	288006	376401	86
10/6/2011	13	8533	8763	slk wtr	8705	134	90020	291594	381614	85
10/7/2011	14	8233	8443	slk wtr	8663	110	88370	289480	377850	86
10/8/2011	15	7841	8143	slk wtr	9076	141	88148	287189	375337	86
10/8/2011	16	7633	7843	slk wtr	8687	96	89042	289644	378686	87
10/8/2011	17	7333	7543	slk wtr	8686	75	89423	287961	377384	86
10/8/2011	18	7033	7243	slk wtr	8726	48	89240	289351	378591	86
	Totals				**160829**	**3001**	**1598151**	**5040975**		

Water to Recover **163830 bbls**

51-013396

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: January 23, 2013
API #: 47-051-01397

Farm name: Corley Operator Well No.: 3H

LOCATION: Elevation: 1272' Quadrangle: Powhatan Point 7.5'

District: Franklin County: Marshall
Latitude: 14,170 Feet South of 39 Deg. 47 Min. 30 Sec.
Longitude 3,770 Feet West of 80 Deg. 45 Min. 00 Sec.

Company: Gastar Exploration USA, Inc.

Address: 229 West Main St., Suite 301	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Clarksburg, WV 26301	20"	40'	40'	Sanded
Agent: Michael McCown	13-3/8"	1057'	1057'	914'
Inspector: Carl McCune	9-5/8"	2506'	2506'	960'
Date Permit Issued: 01/24/2011	5-1/2"	12,308'	12,308'	3394'
Date Well Work Commenced: 07/06/2011	2-3/8"		6642'	
Date Well Work Completed: 11/15/2011				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☐ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 6,633'				
Total Measured Depth (ft): 12,310'				
Fresh Water Depth (ft.): 60'				
Salt Water Depth (ft.): 1,600'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): refer to page 2				
Void(s) encountered (N/Y) Depth(s) N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 6835'
Gas: Initial open flow 2757 MCF/d Oil: Initial open flow 45 Bbl/d
Final open flow 2620 MCF/d Final open flow 41 Bbl/d
Time of open flow between initial and final tests 24 Hours
Static rock Pressure 2300 csg. psig (surface pressure) after _____ Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Michael McCown
Signature

1/24/13
Date

51-01397

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes X No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list
YES : GR, Mudlog, Acousti, Density, Induction, Mech Prop, & XMAC

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: Surface:	Top Depth / Bottom Depth		
Sewickley:	Top:885, Base: 905	Java:	5378, 5698
Pittsburgh coal:	1061, 1071	Rhinestreet:	6190, 6500
Maxton:	1980, 2030	Cashaqua:	6547, 6692
Big Lime:	2043, 2073	Middlesex:	6642, 6662
Big Injun:	2079	West River:	6664, 6724
Base of Big Injun:	2223	Geneseo:	6726, 6744
Weir:	2397, 2567	Tully:	6740, 6775
Berea:	2581, 2821	Hamilton:	6786, 6836
Gordon:	2855, 2885	Marcellus:	6835, 6888
Benson:	3617, 3627	Onondaga:	6889, NA (TD'd before base)

Fluid & Sand Volume Summary - Corley #3H

Date	Stage	Perforated interval From ft	Perforated interval To ft	Fluid Type	Frac Fluid bbls	Pump Down bbls	100 mesh lbs	40/70 M lbs	Total Sand lbs	Avg Inj BPM
9/19/2011	1	12033	12243	slk wtr	8967	0	88321	289166	377487	85
9/20/2011	2	11733	11943	slk wtr	8827	386	88803	287493	376296	86
9/20/2011	3	11433	11643	slk wtr	9025	340	88007	292688	380695	87
9/21/2011	4	11133	11343	slk wtr	8904	310	88404	287259	375663	87
9/21/2011	5	10833	11043	slk wtr	8943	326	88076	288113	376189	87
9/22/2011	6	10533	10743	slk wtr	8983	252	88048	290895	378943	87
9/22/2011	7	10233	10443	slk wtr	8885	199	88070	287271	375341	88
9/22/2011	8	9933	10038	slk wtr	8858	189	88242	286712	374954	86
9/23/2011	9	9633	9843	slk wtr	8773	214	88032	283854	371886	86
9/23/2011	10	9333	9543	slk wtr	8971	159	88128	287426	375554	84
9/24/2011	11	9033	9133	slk wtr	8772	133	88112	287174	375286	86
9/24/2011	12	8733	8943	slk wtr	8873	118	88087	287448	375535	91
9/24/2011	13	8433	8643	slk wtr	9043	102	88102	289126	377228	88
9/25/2011	14	8133	8343	slk wtr	8873	89	88134	287287	375421	90
9/25/2011	15	7833	8043	slk wtr	8943	56	88337	286789	375126	90
9/25/2011	16	7533	7743	slk wtr	8768	45	88209	287045	375254	91
9/26/2011	17	7140	7443	slk wtr	8946	41	88047	290773	378820	87
	Totals				**151354**	**2959**	**1499159**	**4896519**		

Water to Recover **154313 bbls**

51-01397

WR-35
Rev (5-01)

DATE: 2/18/13
API #: 47-073-01609-R

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

Well Operator's Report of Well Work

Farm name: Lillian Cornell — Operator Well No.: 2

LOCATION: Elevation: 1005' — Quadrangle: Schultz – 7.5'

District: Jefferson — County: Pleasants
Latitude: 11130' Feet South of 39 Deg. 20 Min. 0.0 Sec.
Longitude 8270' Feet West of 81 Deg. 12 Min. 30.0 Sec.

Company: Schultz Run Gas Company

	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: 300 Capitol Street, Suite 1500				
Charleston, WV 25301				
Agent: Pete Pauley				
Inspector: Joe Taylor	8 5/8"	975'	975'	CTS
Date Permit Issued: 9/7/10				
Date Well Work Commenced: 10/27/10				
Date Well Work Completed: 10/31/10				
Verbal Plugging:	4 ½"	4100'	4100'	By rule 35 CSR 4-11.1
Date Permission granted on:				
Rotary X Cable Rig				
Total Depth (feet):				
Fresh Water Depth (ft.): N/A				
Salt Water Depth (ft.): 1200'				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.):				

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WV Department of
Environmental Protection

OPEN FLOW DATA

Producing formation: Salt Sand - Pay zone depth (ft) 1072'- 1132'
Gas: Initial open flow: TSTM MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 15 MCF/d (Comingled) Final open flow 0 Bbl/d
Time of open flow between initial and final tests 24 Hours
Static rock Pressure 250 #'s psig (surface pressure) after 24 Hours

Second producing formation: Maxton Sandstone - Pay zone depth (ft) 1530'- 1544'
Gas: Initial open flow TSTM MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 15 MCF/d (Comingled) Final open flow 0 Bbl/d
Time of open flow between initial and final tests 24 Hours
Static rock Pressure 250#'s psig (surface pressure) after 24 Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Signed: _____ 2/18/13
By: Pete Pauley, President, Schultz Run Gas Co.
Date: 2/18/13

73-01609R

WR-35 – Page 2 Details of Frac

API #: 47-073-01609 -R

Well Name: Cornell # 2

District: Jefferson County: Pleasants

Company Name: Schultz Run Gas Company

Date of Squeeze Job – 9/17/10 - Perf 4 holes from 1590-1594

Squeezed to 762' Cement Bond Log Run on 10/26/10

STAGE 1 - Maxton

Perforate Maxton from 1534'-1544' – 8 holes of 3 1/8" HSC perf.

Stage 1 of 2: Frac w/ Universal Well Service – 75 Quality Foam Frac using 220,000Scf N2 – 25,100 #'s of 20/40 Sand and 500 Gal of 15% HCL – Breakdown @ 2866#'s.

Set Temporary Plug @ 1206'

STAGE 2 – Salt Sand

Perforate Salt Sand from 1142'-1134' – 8 holes of 3 1/8" HSC perf and from 1126'-1116' – 8 holes of 3 1/8" HSC

Stage 2 of 2: Frac w/ Universal Well Service – 75 Quality Foam Frac using 298,227 Scf N2 – 28,400 #'s of 20/40 Sand and 500 Gal of 15% HCL – Breakdown @ 3774 #'s.

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: March 4, 2013
API #: 47-~~7302512~~
73-02542

Farm name: Alton, Gary & Randy Operator Well No.: Alton #1

LOCATION: Elevation: 719' Quadrangle: Willow Island

District: Jefferson County: Pleasants
Latitude: ____ Feet South of ____ Deg. ____ Min. ____ Sec.
Longitude ____ Feet West of ____ Deg. ____ Min. ____ Sec.

Company: Buckeye Oil Producing Co.

Address: P.O. Box 129	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Wooster, OH 44691	9-5/8"	250'	250'	cmt to surface
Agent: Henry W. Sinnett	7"	1223'	1223'	167 cu/ft.
Inspector: Joe Taylor	4-1/2"	3926'	3926'	248 cu/ft.
Date Permit Issued: 4/5/12				
Date Well Work Commenced: 5/1/12				
Date Well Work Completed: 12/30/12				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 3952'				
Total Measured Depth (ft): 3952'				
Fresh Water Depth (ft.): 60'				
Salt Water Depth (ft.): 750'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): –				
Void(s) encountered (N/Y) Depth(s) –				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Shale Pay zone depth (ft) 3120-3141
Gas: Initial open flow -0- MCF/d Oil: Initial open flow -0- Bbl/d
Final open flow 5 MCF/d Final open flow -0- Bbl/d
Time of open flow between initial and final tests 72 Hours
Static rock Pressure 1100 psig (surface pressure) after 72 Hours

Second producing formation Shale Pay zone depth (ft) 2828-2864
Gas: Initial open flow -0- MCF/d Oil: Initial open flow -0- Bbl/d
Final open flow 5 MCF/d Final open flow -0- Bbl/d
Time of open flow between initial and final tests 72 Hours
Static rock Pressure 1100 psig (surface pressure) after 72 Hours

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I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Mark J. Tyler 3-4-13
Signature Date

73.02542

Page 2 – OPEN FLOW DATA

Producing formation 5th Pay zone depth (ft) 2142-2172
Gas: Initial open flow -0- MCF/d Oil: Initial open flow -0- Bbl/d
Final open flow 5 MCF/d Final open flow -0- Bbl/d
Time of open flow between initial and final tests 72 Hours
Static rock Pressure 600 psig (surface pressure) after 72 Hours

Producing formation Gordon-Gantz Pay zone depth (ft) 1968-2018
Gas: Initial open flow -0- MCF/d Oil: Initial open flow 1 Bbl/d
Final open flow 5 MCF/d Final open flow 1 Bbl/d
Time of open flow between initial and final tests 72 Hours
Static rock Pressure 600 psig (surface pressure) after 72 Hours

73.02542

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes_____ No X

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Temperature, Gamma Ray, Neutron, Density & Induction

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Perfs: 3120 - 3141, 14 shots. Frac w/ 319 Bbls. water: 261,924 SCF Nitrogen 15,000# 20/40 sand. Set baffle @ 2880

Perf: 2828 - 2864, 17 shots. Frac w/ 248 Bbls. water: 223,611 SCF Nitrogen 15,000# sand. 16 BPM.

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: Surface:	Top Depth /	Bottom Depth
Big Injun	1124	1170
Berea	1577	1579
Gantz	1692	1740
Gordon	1830	1855
5th Sand	2142	2172
Shale	2172	4050

73.02542

Page 2 – Perforated Intervals, Fracturing, or Stimulating

Perforated Intervals, Fracturing, or Stimulating:

Perf: 2142-2172, 31 shots. Frac w/ 40,880 Gal. Water. 10,000# 20/40 sand. 20 BPM @ 2790 psi

Perf: 1968-2018, 51 shots. Frac w/ 21,012 Gal. Water. 9,000# 20/40 sand. 10 BPM @ 2930 psi

WR-35
Rev (5-01)

DATE: 9/26/12
API # : 47-085-09869- F

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

Well Operator's Report of Well Work

Farm name: FOX Operator Well No.: 42

LOCATION: Elevation: 948' Quadrangle: HARRISVILLE 7.5'

District: GRANT County: RITCHIE
Latitude: 6030' Feet South of 39 Deg. 12 Min. 30 Sec.
Longitude 6640' Feet West of 81 Deg. 05 Min. 00 Sec.

Company: TERM ENERGY CORPORATION

	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: 713 EAST MAIN ST.				
HARRISVILLE, WV 26362	9 5/8"	252'	252'	C.T.S.
Agent: LEROY BAKER				
Inspector: DAVE COWAN	7"	1225'	1225'	248.8 cu. Ft.
Date Permit Issued: 7/10/12				
Date Well Work Commenced: 8/13/12	4 ½"	4302'	4302'	434.2 cu. Ft
Date Well Work Completed: 8/13/12				
Verbal Plugging:				
Date Permission granted on:				
Rotary X Cable Rig				
Total Depth (feet): 4615'				
Fresh Water Depth (ft.): 75'				
Salt Water Depth (ft.): none				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): N/A				

OPEN FLOW DATA

Producing formation Big Injun Pay zone depth (ft) 1900' to 1906'
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

Second producing formation Maxton Pay zone depth (ft) 1685' to 1691'
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 20 MCF/d Final open flow 5 Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure 230 psig (surface pressure) after 24 Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Signed: _____
By: Leroy Baker - Agent
Date: 9/26/12

FOX #42
47-085-09869
8/13/12
See previous WR-35

85-09869F

Set frack plug at 2014'

1st Stage Big Injun (15 holes) (1900' – 1906') — 753 Gal. Acid, Avg. Pres.2376, Avg. Rate 18.6 BPM, 403,771 scf N2, 200 sks 20/40 sand, 139 bbls fluid

Set frack plug at 1700'

2nd Stage Maxton (14 holes) (1685' – 1687') (1689' – 1691') — 500 Gal. Acid, Avg. Pres.2457, Avg. Rate 17.7 BPM, 198104 scf N2, 100 sks 20/40 Sand, 104 bbls fluid

WELL LOG

Sand, Shale & Red Rock	0'	1660'
Maxton	1660'	1694'
Sand & Shale	1694'	1802'
Big Lime	1802'	1847'
Keener	1847'	1910'
Big Injun	1910'	1986'
Sand & Shale	1986'	2070'
Weir	2070'	2170'
Sand & Shale	2170'	2345'
Berea	2345'	2354'
Sand & Shale	2354'	2451'
Gantz	2451'	2463'
Sand & Shale	2463'	2739'
Gordon	2739'	2754'
Sand & Shale	2754'	3314'
Warren	3314'	3320'
Sand & Shale	3320'	3452'
Upper Speechley	3452'	3520'
Sand & Shale	3520'	3546'
Lower Speechley	3546'	3808'
Sand & Shale	3808'	3840'
Balltown	3840'	4171'
Sand & Shale	4171'	4208'
Bradford	4208'	4213'
Sand & Shale	4213'	4615' TD

Water shows: 75' Damp

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 02/01/2013
API #: 47-091-01126

Farm name: Denjen, Richard L. Operator Well No.: W.M. Compton 1A

LOCATION: Elevation: 1993' Quadrangle: Gladesville 7.5'

District: Fetterman County: Taylor
Latitude: 4,500 Feet South of 39 Deg. 27 Min. 30 Sec.
Longitude 5,300 Feet West of 79 Deg. 55 Min. 00 Sec.

Company: Petroleum Development Corporation

Address: 120 Genesis Boulevard	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Bridgeport, WV 26330	11 3/4"	33'		
Agent: Bob Williamson	8 5/8"	1054'	1054'	345
Inspector: Joe McCourt	5 1/2"	8092'	8092'	384
Date Permit Issued: 04/23/2009				
Date Well Work Commenced: 08/19/2009	2 3/8"		7914'	
Date Well Work Completed: 11/02/2009				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 8041'				
Total Measured Depth (ft): 8165'				
Fresh Water Depth (ft.): 233', 270'				
Salt Water Depth (ft.): N/A				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): NR				
Void(s) encountered (N/Y) Depth(s) N				

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Environmental Protection

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 7935'
Gas: Initial open flow ---- MCF/d Oil: Initial open flow ---- Bbl/d
Final open flow 338 MCF/d Final open flow ---- Bbl/d
Time of open flow between initial and final tests ---- Hours
Static rock Pressure 1200 psig (surface pressure) after 48 Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

02/07/2013
Date

91-01126

Were core samples taken? Yes_____ No XX Were cuttings caught during drilling? Yes XX No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Mud Log from 1100'- TD. Schlumberger
Dens/Neu/GR/Cal/PE & Dens/Neu/LaterLog/GR/Cal from 70' - 8165'. Schlum. CBL/GR/CL from 8080'-5800'. Schlum Dev Log from 8120-1065'.

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

10/23/09: MIRU Hotwell & perf Marcellus from 8063-73 & 8028-38.11/02/2009:Two-stage Marcellus completion. The first stage was a slickwater treatment with 2360 sks of 100 mesh and 2697.71 sks of 40/70 mesh white sands. The clean volume pumped was 10,503 bbl. The breakdown pressure was 3925 psi, with an initial ISIP of 3705 psi (FG=0.89). The well treated at an average rate of 65 bpm with an average treating pressure of 4980 psi. ISIP, 4094 psi. MIRU Hotwell & set Alpha plug @ 7990'. Perf 2nd stage in Marcellus from 7935-7955. 2nd stage was a slickwater treatment with 2310 sks of 100 mesh and 2197.12 sks of 40/70 mesh white sands. The clean volume pumped was 8416 bbl. The breakdown pressure was 4135 psi, with an initial ISIP of 4144 psi (FG=0.95, possibly inflated due to the possible charge from stage I). The well treated at an average rate of 75 bpm with an average treating pressure of 5890 psi. ISIP, 4250 psi.

Plug Back Details Including Plug Type and Depth(s): BJ 2-25-13

Formations Encountered: Surface:	Top Depth	Bottom Depth					
Little Lime	1008	1022		Tully	7520	7648	
Big Lime	1044	1218		Marcellus	7984	8081	Gas
Injun	1218	1277		Onondaga	8081	8098	
Pocono	1308	1389		Huntersville	8098	8165	MD-TD
Berea	1404	1434					
50 Foot	1600	1622					
30 Foot	1644	1670					
4th Sand	2132	2170					
5th Sand	2242	2303					
Balltown	3170	3404					
Riley	3942	3951					
Benson	4199	4254					
Elks	4804	4858	Gas				
Sycamore	6780	6800					
Geneseo	7513	7520	Gas				

WR-35

01/18/2011 ✓

API # 47 095 01510F

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

Well Operator's Report of Well Work

Farm name: TALKINGTON, MARK Operator Well No.: S. P. LEMASTERS M-10

LOCATION: Elevation: 1,114.00 Quadrangle: CENTERPOINT 7.5'

District: MCELROY County: TYLER
Latitude: 12,700 Feet south of 39 Deg 30 Min 0 Sec.
Longitude: 2,300 Feet west of 80 Deg 40 Min 00 Sec.

Company: EAST RESOURCES, INC.
P.O. BOX 5519
VIENNA, WV 26105-5519

Agent: PHILIP S. ONDRUSEK

Inspector: JOE TAYLOR
Permit Issued: 01/18/11
Well work Commenced: 08/15/11
Well work Completed: 08/17/11
Verbal plugging permission granted on:
Rotary X Cable Rig
Total Depth (feet) 3142
Fresh water depths (ft) NONE

Salt water depths (ft) NONE

Is coal being mined in area (Y/N) N
Coal Depths (ft): NONE

Casing/ tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
8 5/8"	393.50'	220'	150 sks
4 1/2"	3083.25'	3083.25'	300 sks

OPEN FLOW DATA *WATERFLOOD INJECTOR

Producing formation Gordon Pay zone depth (ft) 2991-3044
Gas: Initial open flow * MCF/d Oil: Initial open flow * Bbl/d
Final open flow * MCF/d Final open flow * Bbl/d
Time of open flow between initial and final tests Hours
Static rock pressure psig (surface pressure) after Hours

Second producing formation Pay zone depth (ft)
Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d
Final open flow MCF/d Final open flow Bbl/d
Time of open flow between initial and final tests Hours
Static rock pressure psig (surface pressure) after Hours

NOTE: ON BACK OF THIS FORM, PUT THE FOLLOWING: 1) DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2) THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

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FEB 4 2013
WV DEPARTMENT OF ENVIRONMENTAL PROTECTION

For: EAST RESOURCES, INC.
By:
Date: 2/11/13

95-01510 F

Treatment : Swabbed well -spotted 500 gals 15%HCL - loaded well with fresh water- perforated Gordon 3020'-3040'- shot perforations with gas gun
returned well to injection

Well Log : SEE ORIGINAL WELL RECORD

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WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: Feb. 27th, 2013
API #: 047-095-02032

Farm name: Ball Operator Well No.: 1 H

LOCATION: Elevation: 1195 ft Quadrangle: Porter Falls

District: Ellsworth County: Tyler
Latitude: N39.50596 Feet South of ____ Deg. ____ Min. ____ Sec.
Longitude W80.75823 Feet West of ____ Deg. ____ Min. ____ Sec.

Company: Petroedge Energy LLC

Address: 4477 Williamstown Pike	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Williamstown, WV 26187	20"	30	30	Cement to surface
Agent: Dan Mullins	13 3/8"	530	530	Cement to Surface
Inspector: Joe Taylor	9 5/8"	2765	2765	Cement to surface
Date Permit Issued: 7/28/11	5 1/2"	13465	13414	Cement to surface
Date Well Work Commenced: 10/21/11	2 3/8"		7325.8	Production Tubing
Date Well Work Completed: 2/13/13				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☐ Cable ☐ Rig ☑				
Total Vertical Depth (ft): 6910				
Total Measured Depth (ft): 13465				
Fresh Water Depth (ft.): 155				
Salt Water Depth (ft.): 1580				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 175				
Void(s) encountered (N/Y) Depth(s) N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 6910
Gas: Initial open flow 2000 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 4219 MCF/d Final open flow 168 Bbl/d
Time of open flow between initial and final tests 120 Hours
Static rock Pressure 3100 psig (surface pressure) after 24 Hours

Second producing formation ____ Pay zone depth (ft) ____
Gas: Initial open flow ____ MCF/d Oil: Initial open flow ____ Bbl/d
Final open flow ____ MCF/d Final open flow ____ Bbl/d
Time of open flow between initial and final tests ____ Hours
Static rock Pressure ____ psig (surface pressure) after ____ Hours

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I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Dan Mullins
Signature

3/1/13
Date

95-02032

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes X No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Mud Log, GR, CBL

Drill cuttings were collected, analyzed, and disposed of with the rest of the drill cuttings

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Perforated Marcellus Shale: 7379' - 13363'

20 Stage Stimulation

843,900 lbs 100 mesh, 5,958,000 lbs 40/70 mesh, 821,200 lbs 20/40 mesh

154,372 bbls water

Plug Back Details Including Plug Type and Depth(s):

Cast Iron Bridge Plug @ 13400'

Formations Encountered: Surface:	Top Depth /	Bottom Depth
Coal	175	177
Gordon	3140	3186
Warren	3619	3652
Java	5270	5310
Lower Alexander	5514	5569
Rhinestreet	6367	6621
Middlesex	6621	6822
West River	6822	6938
Genesee	6938	6955
Tully	6955	7032
Hamilton	7032	7143
Marcellus	7143	

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: January 9, 2013
API #: 47-95-02033

Farm name: Anne Spencer Operator Well No.: 1112

LOCATION: Elevation: 703' Quadrangle: Paden City

District: Ellsworth County: Tyler
Latitude: 14,711 Feet South of 39 Deg. 30 Min. 04.59 Sec.
Longitude 9,073 Feet West of 80 Deg. 54 Min. 25.79 Sec.

Company: ?

Address: Triad Hunter, LLC	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
P.O. Box 430, Reno, Ohio 45773				
Agent: Kimberly Arnold	20"	40'	40'	
Inspector: Joe Taylor	13 3/8"	444'	444'	438 cu. ft.
Date Permit Issued: 7/19/2011	9 5/8"	1972'	1972'	789 cu. ft.
Date Well Work Commenced: 11/11/11	5 1/2"	11015'	11013'	3193 cu. ft.
Date Well Work Completed: 11/09/12	2 3/8"			
Verbal Plugging:				
Date Permission granted on:				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 5996.5' pb TVD	6215			
Total Measured Depth (ft): 11062'				
Fresh Water Depth (ft.):				
Salt Water Depth (ft.):				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.):				
Void(s) encountered (N/Y) Depth(s) None				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Shale Pay zone depth (ft) 6020
Gas: Initial open flow 850 MCF/d Oil: Initial open flow 2.19 Bbl/d
Final open flow 4246 MCF/d Final open flow 9.10 Bbl/d
Time of open flow between initial and final tests 359 Hours
Static rock Pressure 700 psig (surface pressure) after 359 Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

11/9/2013
Date

95-02033

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes X No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list_____

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Please see attached sheet.

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: Surface:	Top Depth /	Bottom Depth
0'- 376' shale	2012'-2107' Weir	6014'-6068' Marcellus
376'- 426' siltstone and shale	2107'-2132' shale and siltstone	6068'-TD Onondaga
426'- 886' shale and siltstone	2132'-2136' Berea	~ 6215
886'-923' sandstone	2136'-2609' shale and siltstone	
923'-960' shale, trace siltstone	2609'-2626' Fifth Sand	
960'-1092' 1st Salt Sand	2626'-3141' shale trace siltstone	
1092'-1146' shale	3141'-3189' 1st Warren	
1146'-1183' 2nd Salt Sand	3189'-4504' shale silstone	
1183'-1394' shale and siltstone	4504'-4540' Riley	
1394'-1428' 3rd Salt Sand	4540'-4650' Base of Huron Shale	
1428'-1552' shale and siltstone	4650'-5284' Angola	
1552'-1644' Greenbrier Lime	5384'-5716' Java	
1644'-1650' shale	5716'-5883' Middlesex	
1650'-1821' Big Injun	5883'-5990' Geneseo	
1821'-2012' shale, trace siltstone	5990'-6014' Tully Lime	

Spencer #1112
Perf Spacing for 17 Stages

95-0203

Stage Length:	250
Number of Clusters:	4
Dist. Between Perfs:	61'
Perf Length:	3'
Stages:	17
Start Depth:	10917'
90 @:	6904

		Plug Depth	Interval 1	Interval 2	Interval 3	Interval 4	FT Stage Length	PSI Avg Treating Pressure	PSI Max Pressure	BPM Avg Rate	BPM Max Rate	bbls Fluid Volume	lbs Total Sand
Stage	1	10917	10881'-10884'	10813'-10816'	10799'-10782'		195	7465	8471	53	55	2459	5200
Stage	2	10722	10697'-10694'	10633'-10630'	10569'-10566'	10505'-10502'	250	7114	8142	76	82	8495	440000
Stage	3	10472	10442'-10439'	10378'-10375'	10314'-10311'	10250'-10247'	260	8272	8972	61	69	2571	2500
Stage	4	10212	10187'-10184'	10123'-10120'	10059'-10056'	9995'-9992'	260	6708	8653	70	81	6139	138500
Stage	5	9952	9932'-9929'	9868'-9865'	9804'-9801'	8704'-9737'	245	6746	7486	73	76	8674	440000
Stage	6	9707	9677'-9674'	9613'-9610'	9549'-9546'	9458'-9482'	255	6647	6939	76	81	8577	440000
Stage	7	9452	9422'-9419'	9358'-9355'	9249'-9291'	9230'-9227'	255	6454	6948	75	81	8593	440000
Stage	8	9197	9167'-9164'	9103'-9100'	9039'-9036'	8975'-8972'	267	6551	6931	76	82	8497	440000
Stage	9	8930	8912'-8909'	8848'-8845'	8784'-8781'	8720'-8717'	248	6681	7096	71	75	8623	440000
Stage	10	8682	8657'-8654'	8593'-8590'	8529'-8526'	8465'-8462'	250	6437	7096	74	76	9705	440000
Stage	11	8432	8402'-8399'	8338'-8335'	8274'-8271'	8210'-8207'	255	6396	7134	75	80	8728	440000
Stage	12	8177	8147'-8144'	8083'-8080'	8019'-8016'	7955'-7952'	255	6158	6398	79	82	8610	440000
Stage	13	7922	7892'-7889'	7828'-7825'	7764'-7761'	7700'-7697'	255	6305	6554	79	82	8458	440000
Stage	14	7667	7637'-7634'	7573'-7570'	7509'-7506'	7445'-7442'	255	6125	6477	77	80	8382	440000
Stage	15	7412	7382'-7379'	7318'-7315'	7254'-7251'	7190'-7187'	247	6095	6603	75	80	8602	440000
Stage	16	7165	7148'-7145'	7063'-7060'	6999'-6996'	6935'-6932'	263	6173	6710	77	81	8626	440000
Stage	17	6902	6872'-6869'	6808'-6805'	6744'-6741'	6680'-6677'	6902	5841	6233	78	81	8478	440000

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: January 9, 2013
API #: 47-95-02034

Farm name: Anne Spencer Operator Well No.: 1113

LOCATION: Elevation: 703' Quadrangle: Paden City

District: Ellsworth County: Tyler
Latitude: 14,711 Feet South of 39 Deg. 30 Min. 04.59 Sec.
Longitude 9,089 Feet West of 80 Deg. 54 Min. 25.99 Sec.

Company: Address: Triad Hunter, LLC	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
P.O. Box 430, Reno, Ohio 45773				
Agent: Kimberly Arnold	20"	40'	40'	
Inspector: Joe Taylor	13 3/8"	442'	440'	408 cu. ft.
Date Permit Issued: 6/21/2011	9 5/8"	2009'	2009'	796 cu. ft.
Date Well Work Commenced: 12/9/11	5 1/2"	10566'	10539'	3399 cu. ft.
Date Well Work Completed: 11/15/12	2 3/8"			
Verbal Plugging:				
Date Permission granted on:				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 6029'				
Total Measured Depth (ft): 10566'				
Fresh Water Depth (ft.):				
Salt Water Depth (ft.):				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.):				
Void(s) encountered (N/Y) Depth(s) None				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Shale Pay zone depth (ft) 6030
Gas: Initial open flow 850 MCF/d Oil: Initial open flow 2.19 Bbl/d
Final open flow 4092 MCF/d Final open flow 9.00 Bbl/d
Time of open flow between initial and final tests 359 Hours
Static rock Pressure 720 psig (surface pressure) after 354 Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

1/9/2013
Date

95-02034

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes X No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list_____

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Please see attached sheet.

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: Surface:	Top Depth /	Bottom Depth
0'- 376' shale	2012'-2107' Weir	6014'-6068' Marcellus
376'- 426' siltstone and shale	2107'-2132' shale and siltstone	6068'-TD Onondaga
426'- 886' shale and siltstone	2132'-2136' Berea	
886'-923' sandstone	2136'-2609' shale and siltstone	
923'-960' shale, trace siltstone	2609'-2626' Fifth Sand	
960'-1092' 1st Salt Sand	2626'-3141' shale trace siltstone	
1092'-1146' shale	3141'-3189' 1st Warren	
1146'-1183' 2nd Salt Sand	3189'-4504' shale silstone	
1183'-1394' shale and siltstone	4504'-4540' Riley	
1394'-1428' 3rd Salt Sand	4540'-4650' Base of Huron Shale	
1428'-1552' shale and siltstone	4650'-5284' Angola	
1552'-1644' Greenbrier Lime	5384'-5716' Java	
1644'-1650' shale	5716'-5883' Middlesex	
1650'-1821' Big Injun	5883'-5990' Geneseo	
1821'-2012' shale, trace siltstone	5990'-6014' Tully Lime	

95-020234

Spencer #1113

Perf Spacing for 27 Stages

Stage Length:	150'
Number of Clusters:	3
Dist. Between Perfs:	47'
Perf Length:	3'
Stages:	27
Start Depth:	10460'
90 @:	6057'

		Plug Depth	Interval 1	Interval 2	Interval 3	Interval 4	Stage Length	Avg Treating Pressure	Max Pressure	Avg Rate	Max Rate	Fluid Volume	Total Sand
Stage	1	10460	10445'-10442'	10420'-10417'	10395'-10392'	10369'-10366'	116	7380	9000	78.4	79	7186	214500
Stage	2	10344	10320'-10217'	10270'-10267'	10220'-10217'		150	7245	8281	63.5	66	8383	266000
Stage	3	10194	10170'-10697'	10120'-10117'	10070'-10067'		150	7057	8203	66	73.4	8262	266000
Stage	4	10044	10020'-10017'	9970'-9967'	9920'-9917'		155	6368	7764	72	81	6155	266000
Stage	5	9889	9870'-9867'	9820'-9817'	9770'-9767'		145	6586	7065	76	81	5748	266000
Stage	6	9744	9720'-9717'	9670'-9667'	9620'-9617'		150	6450	7704	76	81	5941	266000
Stage	7	9594	9570'-9567'	9520'-9517'	9470'-9467'		121	6635	7102	79	87	5833	266000
Stage	8	9473	9420'-9417'	9370'-9367'	9320'-9317'		179	6708	7383	78	82	6139	265500
Stage	9	9294	9270'-9267'	9220'-9217'	9170'-9167'		150	7446	8927	55	57	2000	3500
Stage	10	9144	9120'-9117'	9070'-9067'	9020'-9017'		200	6950	7402	76	81	5968	266000
Stage	11	8944	8970'-8967'	8920'-8917'	8870'-8867'		105	6994	7523	74	80	5979	266000
Stage	12	8839	8820'-8817'	8770'-8767'	8720'-8717'		190	6732	7263	70	82	5862	266000
Stage	13	8649	8670'-8667'	8620'-8617'	8570'-8567'		105	6578	6879	72	79	5960	266000
Stage	14	8544	8520'-8517'	8470'-8467'	8420'-8417'		150	6824	7273	73	78	5776	266000
Stage	15	8394	8370'-8367'	8320'-8317'	8240'-8267'		150	6354	7063	77	81	5801	266000
Stage	16	8244	8220'-8217'	8170'-8167'	8120'-8117'		150	6713	7354	75	80	6005	266000
Stage	17	8094	8070'-8067'	8020'-8017'	7970'-7967'		150	6563	7271	73	81	5711	266000
Stage	18	7944	7920'-7917'	7870'-7867'	7820'-7817'		150	6331	6632	77	80	5723	266000
Stage	19	7794	7770'-7767'	7720'-7717'	7670'-7667'		150	6530	8026	69	77	5442	242500
Stage	20	7644	7620'-7617'	7570'-7567'	7520'-7517'		153	6253	7131	66.5	76	5643	266000
Stage	21	7491	7470'-7467'	7420'-7417'	7370'-7367'		247	6352	6998	72	77	6295	266000
Stage	22	7244	7320'-7317'	7270'-7267'	7220'-7217'		50	6551	7636	68	77	5806	266000
Stage	23	7194	7170'-7167'	7120'-7117'	7070'-7067'		155	6401	6829	73	80	5769	266000
Stage	24	7039	7020'-7017'	6970'-6967'	6920'-6917'		145	6359	6961	73	80	5748	266000
Stage	25	6894	6870'-6867'	6820'-6817'	6770'-6767'		122	6065	6383	75	80	5724	266000
Stage	26	6772	6720'-6717'	6670'-6667'	6620'-6617'		178	6199	7079	75	81	5810	266000
Stage	27	6594	6570'-6567'	6520'-6517'	6470'-6467'		150	6785	7996	37	40	2612	3000

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: January 9, 2013
API #: 47-95-02035

Farm name: Anne Spencer Operator Well No.: 1114

LOCATION: Elevation: 703' Quadrangle: Paden City

District: Ellsworth County: Tyler
Latitude: 14,711 Feet South of 39 Deg. 30 Min. 04.59 Sec.
Longitude 9,104 Feet West of 80 Deg. 54 Min. 28.19 Sec.

Company:

Address: Triad Hunter, LLC	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
P.O. Box 430, Reno, Ohio 45773				
Agent: Kimberly Arnold	20"	40'	40'	
Inspector: Joe Taylor	13 3/8"	443'	443'	444 cu. ft.
Date Permit Issued: 6/21/2011	9 5/8"	2005'	2005'	833 cu. ft.
Date Well Work Commenced: 1/11/12	5 1/2"	11420'	11336'	3050 cu. ft.
Date Well Work Completed: 11/13/12	2 3/8"			
Verbal Plugging:				
Date Permission granted on:				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 6029'				
Total Measured Depth (ft): 10566'				
Fresh Water Depth (ft.):				
Salt Water Depth (ft.):				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.):				
Void(s) encountered (N/Y) Depth(s) None				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Shale Pay zone depth (ft) 6030
Gas: Initial open flow 1200 MCF/d Oil: Initial open flow 35.18 Bbl/d
Final open flow 4136 MCF/d Final open flow 7.32 Bbl/d
Time of open flow between initial and final tests 359 Hours
Static rock Pressure 720 psig (surface pressure) after 353 Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

1/9/2013
Date

95-02035

Were core samples taken? Yes_____ No X_____ Were cuttings caught during drilling? Yes X_____ No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list_____

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Please see attached sheet.

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: Top Depth / Bottom Depth
Surface:

0'- 376' shale	2012'-2107' Weir	6014'-6068' Marcellus
376'- 426' siltstone and shale	2107'-2132' shale and siltstone	6068'-TD Onondaga
426'- 886' shale and siltstone	2132'-2136' Berea	
886'-923' sandstone	2136'-2609' shale and siltstone	
923'-960' shale, trace siltstone	2609'-2626' Fifth Sand	
960'-1092' 1st Salt Sand	2626'-3141' shale trace siltstone	
1092'-1146' shale	3141'-3189' 1st Warren	
1146'-1183' 2nd Salt Sand	3189'-4504' shale silstone	
1183'-1394' shale and siltstone	4504'-4540' Riley	
1394'-1428' 3rd Salt Sand	4540'-4650' Base of Huron Shale	
1428'-1552' shale and siltstone	4650'-5284' Angola	
1552'-1644' Greenbrier Lime	5384'-5716' Java	
1644'-1650' shale	5716'-5883' Middlesex	
1650'-1821' Big Injun	5883'-5990' Geneseo	
1821'-2012' shale, trace siltstone	5990'-6014' Tully Lime	

95-0203

Spencer #1114
Perf Spacing for 19 Stages

Stage Length:	250'
Number of Clusters:	4
Dist. Between Perfs:	60'
Perf Length:	3'
Stages:	19
Start Depth:	11255'
90 @:	6049'

		Plug Depth	Interval 1	Interval 2	Interval 3	Interval 4	Interval 5	FT Stage Length	PSI Avg Treating Pressure	PSI Max Pressure	BPM Avg Rate	BPM Max Rate	bbls Fluid Volume	lbs Total Sand
Stage	1	11255	11228'-11225'	11194'-11191'	11160'-11157'	11126'-11123'	11089'-11086'	200	7813	8769	69	81.5	3367	6200
Stage	2	11055	11026'-11023'	10963'-10960'	10900'-10897'	10837'-10834'		250	6572	7502	77	80.5	8959	440000
Stage	3	10805	10776'-10773'	10713'-10710'	10650'-10647'	10587'-10584'		250	6490	6920	75	80	8874	440000
Stage	4	10555	10526'-10523'	10463'-10460'	10400'-10397'	10337'-10334'		250	6660	7379	78	82	8660	440000
Stage	5	10305	10276'-10273'	10213'-10210'	10150'-10147'	10087'-10084'		250	7029	7999	76	81	7215	264000
Stage	6	10055	10026'-10023'	9963'-9960'	9900'-9897'	9837-'9834'		250	6682	7101	78.4	81	9200	440000
Stage	7	9805	9776'-9773'	9713'-9710'	9650'-9647'	9587'-9584'		255	6786	7585	79	82	8809	440000
Stage	8	9550	9526'-9523'	9463'-9460'	9400'-9367'	9337'-9334'		250	6380	6598	78	82	9331	440000
Stage	9	9300	9276'-9273'	9213'-9310'	9150'-9147'	9087'-9084'		243	6752	7349	75	80	8399	440000
Stage	10	9057	9026'-9023'	8963'-8960'	8900'-8897'	8837'-8834'		252	6663	7363	70	77	8462	440000
Stage	11	8805	8776'-8773'	8713'-8710'	8650'-8647'	8587'-8584'		250	6620	7259	74	81	8459	440000
Stage	12	8555	8526'-8523'	8463'-8460'	8400'-8397'	8337'-8334'		250	6650	7700	79	82	8754	440000
Stage	13	8305	8276'-8273'	8213'-8210'	8150'-8147'	8087'-8084'		252	6237	7426	65	81	9988	440000
Stage	14	8053	8026'-8023'	7963'-7960'	7900'-7897'	7837'-7834'		248	6296	7039	77	81	8698	440000
Stage	15	7805	7776'-7773'	7713'-7710'	7650'-7647'	7587'-7584'		250	6461	7469	73	80	8547	440000
Stage	16	7555	7526'-7523'	7463'-7460'	7400'-7397'	7337'-7334'		250	6448	6925	69	77	9704	440000
Stage	17	7305	7276'-7273'	7213'-7210'	7150'-7147'	7087'-7084'		250	6313	6709	70	81	8559	440000
Stage	18	7055	7026'-7023'	6963'-6960'	6900'-6897'	6837'-6834'		250	6193	7245	77	80	8521	440000
Stage	19	6805	6776'-6773'	7713'-7710'	6650'-6647'	6587'-6584'		6805	5942	6568	78	80	10160	647300

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: January 9, 2013
API #: 47-95-02036

Farm name: Anne Spencer Operator Well No.: 1115

LOCATION: Elevation: 703' Quadrangle: Paden City

District: Ellsworth County: Tyler
Latitude: 14,711 Feet South of 39 Deg. 30 Min. 04.59 Sec.
Longitude 9,119 Feet West of 80 Deg. 54 Min. 26.37 Sec.

Company:

Address: Triad Hunter, LLC	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
P.O. Box 430, Reno, Ohio 45773				
Agent: Kimberly Arnold	20"	40'	40'	
Inspector: Joe Taylor	13 3/8"	443'	443'	420 cu. ft.
Date Permit Issued: 6/21/2011	9 5/8"	2010'	2010'	833 cu. ft.
Date Well Work Commenced: 1/31/12	5 1/2"	10965'	10881'	4646.5 cu. ft.
Date Well Work Completed: 04/03/12	2 3/8"			
Verbal Plugging:				
Date Permission granted on:				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 5966'				
Total Measured Depth (ft): 10930'				
Fresh Water Depth (ft.):				
Salt Water Depth (ft.):				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.):				
Void(s) encountered (N/Y) Depth(s) None				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Shale Pay zone depth (ft) 6030
Gas: Initial open flow 1708 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 3394 MCF/d Final open flow 103.68 Bbl/d
Time of open flow between initial and final tests 359 Hours
Static rock Pressure 720 psig (surface pressure) after 255 Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

1/9/2013
Date

95-02036

Were core samples taken? Yes_____ No X_____ Were cuttings caught during drilling? Yes X_____ No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list_____

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Please see attached sheet.

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: Surface:	Top Depth /	Bottom Depth
0'- 376' shale	2012'-2107' Weir	6014'-6068' Marcellus
376'- 426' siltstone and shale	2107'-2132' shale and siltstone	6068'-TD Onondaga
426'- 886' shale and siltstone	2132'-2136' Berea	
886'-923' sandstone	2136'-2609' shale and siltstone	
923'-960' shale, trace siltstone	2609'-2626' Fifth Sand	
960'-1092' 1st Salt Sand	2626'-3141' shale trace siltstone	
1092'-1146' shale	3141'-3189' 1st Warren	
1146'-1183' 2nd Salt Sand	3189'-4504' shale silstone	
1183'-1394' shale and siltstone	4504'-4540' Riley	
1394'-1428' 3rd Salt Sand	4540'-4650' Base of Huron Shale	
1428'-1552' shale and siltstone	4650'-5284' Angola	
1552'-1644' Greenbrier Lime	5384'-5716' Java	
1644'-1650' shale	5716'-5883' Middlesex	
1650'-1821' Big Injun	5883'-5990' Geneseo	
1821'-2012' shale, trace siltstone	5990'-6014' Tully Lime	

Spencer #1115
Perf Spacing for 16 Stages

Stage Length: 245'
Number of Clusters: 4 to 5
Dist. Between Perfs: 59
Perf Length: 3'
Stages: 16
Start Depth: 10930'
90 @: 6998'

		Plug Depth	Interval 1	Interval 2	Interval 3	Interval 4	Interval 5	FT Stage Length	PSI Avg Treating Pressure	PSI Max Pressure	BPM Avg Rate	BPM Max Rate	bbls Fluid Volume	lbs Total Sand
Stage	1	10930	10810'-10807'	10768'-10765'	10720'-10717'	10672'-10669'	10624'-10621'	339	7302	8354	82.5	83.2	8390	427200
Stage	2	10591	10563'-10560'	10501'-10498'	10439'-10436'	10377'-10374'		245	7491	9033	82	83.1	7585	363800
Stage	3	10346	10318'-10315'	10256'-10253'	10194'-10191'	10132'-10129'		245	6979	8531	82	83.4	8235	421700
Stage	4	10101	10073'-10070'	10011'-10008'	9949'-9946'	9887'-9884'		245	8306	9101	56.6	80.8	6001	12000
Stage	5	9856	9828'-9825'	9766'-9763'	9704'-9701'	9642'-9639'		245	6691	7760	82.4	84.1	8522	427000
Stage	6	9611	9583'-9580'	9521'-9518'	9459'-9456'	9397'-9394'		245	7150	7858	84.2	84.4	8769	424400
Stage	7	9366	9338'-9335'	9276'-9273'	9214'-9211'	9152'-9149'		245	6681	8367	83.1	84.1	8278	427200
Stage	8	9121	9039'-9090'	9031'-9028'	8969'-8966'	8907'-8904'		245	6750	8257	82.1	82.4	8428	427200
Stage	9	8876	8848'-8845'	8786'-8783'	8724'-8721'	8662'-8659'		245	7180	7778	82.2	83.1	8362	427200
Stage	10	8631	8603'-8600'	8541'-8538'	8479'-8476'	8417'-8414'		256	8480	9111	61.8	82.3	5050	5000
Stage	11	8375	8358'-8355'	8296'-8293'	8234'-8231'	8172'-8169'		227	6891	8647	82.7	84.2	10322	427000
Stage	12	8148	8113'-8110'	8047'-8044'	7989'-7986'	7917'-7920'		252	8650	N/A	39.5	N/A	5027	N/A
Stage	13	7896	7868'-7865'	7806'-7803'	7744'-7741'	7682'-7679'		245	7406	8218	77.3	82	9702	427200
Stage	14	7651	7623'-7620'	7561'-7558'	7499'-7496'	7437'-7434'		245	6772	8272	76.2	76.2	8190	427200
Stage	15	7406	7378'-7375'	7316'-7313'	7254'-7251'	7191'-7189'		245	7298	8188	78.6	81.5	9305	352600
Stage	16	7161	7133'-7130'	7071'-7068'	7009'-7006'	6747'-6944'		245	7001	8542	78.7	79.1	10140	521600

95-02036

WR-35

DATE: 5/5/12
API: 47-097-03764

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

Well Operator's Report of Well Work

Farm Name: Potter B#3 Operator Well No. EP0503

LOCATION: Elevation: 1849' Quadrangle: Buckhannon 7.5
District: Meade County: Upshur
Latitude: 10385' Feet S. of 38 Deg. 55 Min. 00 Sec.
Longitude: 3895' Feet W. of 80 Deg. 12 Min. 30 Sec.

Company: Energy Production Inc.

Address: PO Box 907		Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. Ft.
Jane Lew, WV 26378		9 5/8"	30'	30'	
		7"	888'	888'	to surface
Agent:	John Haskins	4 1/2"		4024'	190 sacs
Inspector:	Bill Hatfield				
Date Permit Issued:	09/27/10				
Date Well Work Commenced:	03/15/11				
Date Well Work Completed:	04/06/11				
Verbal Plugging:					
Date Permission Granted on:					
Rotary X Cable Rig					
Total Depth (ft):	4123'				
Fresh Water Depth (ft):	280'				

Salt Water Depth (ft):

Is coal being mined in the area (Y/N)? N
Coal Depths (ft): 341'

OPEN FLOW DATA

Producing formations	Pay zone depth (ft)
4th	2120' - 2126'
5th	2160' - 2168'
Bayard	2204' - 2228'
Bradford	3552' - 3561'
Benson	3893' - 3897'

Gas: Initial open flow 500 Mcf/d. Oil: Initial open flow N/A Bbl/d
Final open flow 750 Mcf/d. Final open flow N/A Bbl/d
Time to open flow between initial and final tests: 4 Hours
Static rock Pressure 450 psig (surface press.) after 48 Hours

RECEIVED 2013

NOTE: On back of this form put the following: 1) Details of perforated intervals, fracturing or stimulating, physical change, etc. 2) The well log which is a systematic detailed geological record of all formations, including coal encountered by the wellbore.

Signed: [signature]
By:
Date: 5/5/12

97-03764

HYDRAULIC FRACTURING DETAILS

STAGE	FORMATION	PERFORATIONS	SAND
		# of shots	20/40
1st Stage	Benson	14-Jan	35,000
2nd Stage	Bradford	11	20,000
3rd Stage	Bayard	10	25,000
4th Stage	Fifth Sand	16	15,000
5th Stage	4th	14	25,000

DRILLERS LOG

FORMATION	FROM	TO
Fill	0	10
sand	10	258
sand & shale	258	341
coal	341	355
sand & shale	355	1,425
Big Lime	1,425	1,604
big injun	1,604	1,614
sand & shale	1,614	2,120
4th	2,120	2,126
sand & shale	2,126	2,160
5th	2,160	2,168
sand & shale	2,168	2,204
Bayard	2,204	2,228
sand & shale	2,228	3,552
Bradford	3,552	3,561
sand & shale	3,561	3,893
Benson	3,893	3,897
sand & shale	3,897	T.D.

ELECTRIC LOG

FORMATION	Depth
Big Lime	1390'
Big Injun	1590'
Fourth Sand	2120'
Fifth Sand	2160'
Bayard	2204'
Bradford	3552'
Benson	3893'